The MODERN HOSPITAL

Vol. V *July, 1915* No. 1

AN INVITATION

Convention delegates to the

American Hospital Association
American Medical Association
American Association for Nursing Education
American Nurses' Association
National Organization for Public Health Nursing

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Hospital

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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to their Medical, Surgical, and Nursing Services

Vol. V *July, 1915* No. 1

MOUNT ST. MARY'S HOSPITAL AT NIAGARA FALLS, NEW YORK

A New Hospital, Sanatorium and Hotel Combined—Includes All the Elements to Make for Efficiency, Convenience, Comfort and Pleasure of Patients and Rest Seekers—The Organ a Unique Feature in Hospitals

BY SISTER M. CHERUBIM, SUPERINTENDENT

AT the highest point in the city that takes its name from the world-famed Niagara Falls, stands Mount St. Mary's. Its windows and roof gardens command, on the one hand, magnificent views of the broad Niagara River in its majestic sweep towards the great cataract, while on the other hand the picturesque Niagara Gorge stretches away until, in the distance far to the north, silhouetted against the sky, may be seen the slender outlines of the Brock Monument crowning Queenston Heights. The entire surrounding region is replete with historic, scientific and poetic interest. The cataract, the river, the lakes, the adjacent country within a radius of thirty miles, are redolent of memories, some of them of national import, involving the fortunes of war, the results of extensive scientific explorations, or the triumphs of genius over nature. On a commanding eminence of this enchanted region looms Mount St. Mary's, like some huge castle on the Rhine, drawing admiring inquiries from sightseers roaming through a region where grandeur is almost commonplace. Scarcely anywhere else in America can be found a dozen miles of scenery so beautiful and unusual, so accessible, so full of historic interest and withal so quieting in influence and so marked with the mighty power of the Omnipotent.

Mount St. Mary's, in the midst of this wonderful setting, is primarily a hospital. But it is much more than a hospital, for a large share of the nearly six hundred thousand dollars invested in its buildings and equipment has been devoted to providing a recuperating place for those who, regardless of nationality or creed, are in need of a rest from nerve strain, or a change to perfect quiet from the busy rush incident to modern social and commercial life. One in search of quiet, upbuilding rest is almost unaware of the presence in the same building of a complete hospital, modern and up to the very latest minute in its equipment and service. This is due to the fact that in the plans for the construction of the great fireproof buildings special provision was made for the accommodation of guests whose restoration to health should call for perfect quiet and rest, plenty of air and sunshine, hygienic surroundings and careful attention to diet. So while the same building houses both, the hospital is practically completely shut off both from sight and sound, and the guest may stay a week or a month or longer and never come into contact with any unpleasant features of hospital life.

The moment one enters the wide vestibule at Mount St. Mary's one will note the spirit of quiet and restfulness which pervades the whole institution. The furnishings are rich but of a marked simplicity. The decorative effects throughout are in a harmonious combination of cream and Venetian red, the doors and other wood trimmings, which are small in amount, being natural-finish birch. The wholesome freshness of the atmosphere is due to the perfect system of ventilation, all of the air blown into the rooms being drawn from a stack nearly a hundred feet in the air and thoroughly washed by screening through a great air-conditioning machine.

The hospital, comprising a group of four fire-

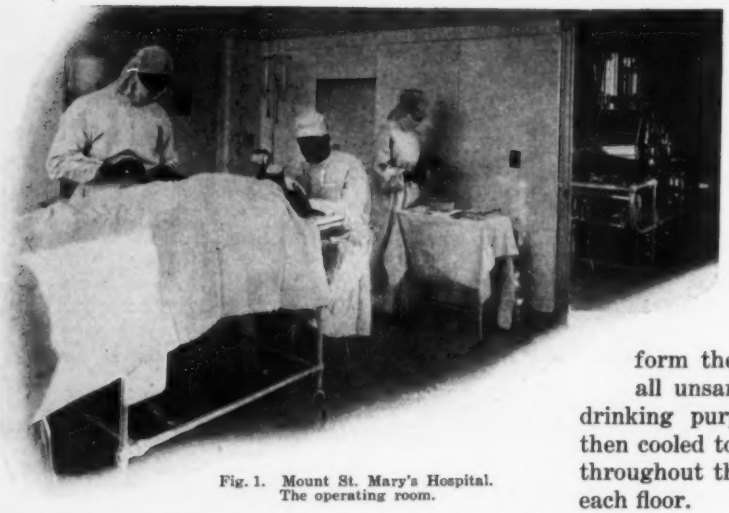


Fig. 1. Mount St. Mary's Hospital. The operating room.

proof buildings connected by means of arcades, is constructed of non-porous brick with stone trimmings. It contains seventy-five private rooms and ample ward accommodations.

The main central building, which contains the administration offices, consists of a ground floor basement, with six floors above. The north and south pavilions also have basements, with four floors above. To the rear is a service building consisting of a sub-basement, a ground floor and four floors above. Automatic elevator service carries one quickly to all the floors. The corridors are wide and airy. The stair halls are partitioned off from the main corridors, preventing the transmission of noise and odors. Off the arcades of each floor are located the foyers, which are available to the visiting friends of the patients; also the nurses' signal stations, where patients' calls for the nurse are silently registered by a lighting system; on each floor are located, likewise, the nurses' desks, telephones, auxiliary clocks, and similar accessories.

The lighting system throughout is indirect—by electricity—and patients may, without rising, turn the light off and on by means of a push button near the bed. Every room in the entire hospital has outside light. The private rooms are of goodly size, sound-proof, and with high ceilings, and arranged along the lines of high-grade apartments, thus lessening the possible gloom of the sick room. All suites and many of the single rooms have private baths and lavatories, and the wards are correspondingly equipped.

The ventilation system provides special air intakes, cleaning all incoming air by screening; the active circulation of air through the operating rooms is assured at all times by an independent ventilating system. It is possible to warm or cool the building, as may be desired, and within reasonable limits to control the humidity.

It is doubtful if any other restorium in the country is so well equipped from the standpoint of sanitation as Mount St. Mary's. The walls and ceilings are painted; the floors, which are of tile and almost noiseless, are curved up to form the baseboard, thus doing away with all unsanitary corners. Water supplied for drinking purposes is distilled and oxygenated, then cooled to about 38 degrees F. and circulated throughout the building to drinking fountains on each floor.

The plan of the wards is known as the unit type; each floor in itself is essentially a complete, self-contained hospital, having all the necessary rooms and facilities for ministering to the comfort of the patients. There is one thing about Mount St. Mary's that cannot be over-emphasized—its newness in everything. Not only is its structure and exterior built along the newest and latest architectural lines, but its inner equipment includes the latest productions in surgical and hospital appliances and apparatus. Examine, for instance, a single ward and you will find that every object in it has been built, selected and installed with special care to serve a special purpose. You will notice that the wards are so built and the beds so arranged that there is a window between every two beds; and on the north side of the ward building there are large open-air porches accessible to both bed patients and convalescents. To each bed is allotted 1,200 cubic feet of air space.

Fig. 2. Mount St. Mary's Hospital. The chapel.

The springs and mattresses have the latest mechanical devices, which permit the raising of the patient's head without his noticing it. There is a drop light over each patient's bed; and the "silent call system" is installed for signaling the nurse in attendance. The latter is summoned by light instead of bells, and the signal cannot be extinguished except by the switch at the patient's bed. The utility rooms adjoining the wards on each floor are so arranged as to minimize the time required by the nurse for the performance of her necessary duties, thereby assuring the greatest amount of personal care for the patient. They contain a complete equipment for the steam sterilization of the ward utensils, etc., as well as a steam drying closet and blanket warmers. Dressing rooms are provided on each floor to which bed patients may be taken for special dressings or examinations.

Fig. 4. Mount St. Mary's Hospital.
Palm room and sun parlor.

The operating rooms, which are on the fifth floor, contain a modern surgical plant, sterilizing and supply rooms, etherizing and recovery rooms, doctors' and nurses' scrub rooms, instrument and sink rooms and a dressing room with shower bath, metal lockers, etc., for surgeons, all of which may be entered from the main corridor and which lead to either of the two operating rooms.

The operating plant is remote from the remainder of the hospital. It occupies a special floor, separated from the floors below by an enclosed stairway and elevator shaft. The isolated position of this part of the hospital insures privacy to the patient, the absence of all disturbance to the operator, and the immaculate cleanliness and aseptic condition which is essential in rooms devoted to major surgery. Off the arcade on this floor is the x-ray department with its waiting room, its diagnosis and treatment room, dark room, and a room for the storage of plates and records.

A fully equipped emergency operating department, with its accessories, opens into a corridor apart from the main hospital corridor. The ambulance entrance, adjoining the emergency surgery, is arranged independently of the public entrance to the hospital, and is so located as to eliminate publicity and conserve the strength of the patient by giving direct access to the emergency and treatment rooms for the reception of ambulance cases. On this floor also are the rooms provided for the treatment of alcoholic patients. This department, with its accessory dependencies, is entirely shut off from the main corridor and has a separate entrance.

Unusual care is given to proper diet. The foods are prepared in kitchens comprising the most advanced sanitary equipment by chefs skilled in dietetics. The department includes a large main kitchen, a small diet kitchen for the preparation of delicacies, a bakery, store rooms, and separate refrigerators for meat, fish, vegetables, milk, butter and eggs. The refrigerators are cooled by coils from the refrigerating plant, and thus no foods come in contact with ice vapors. Niagara Falls is the center of the great Niagara fruit belt and the fresh products of the farm are brought in daily. The diet kitchens, or serving pantries, are centrally located on all floors above the general kitchen and are connected with it by electric dumbwaiters. Very elaborate apparatus has been provided for disinfecting and sterilizing, even each pantry having a machine for sterilizing the dishes and tableware. The most scru-

Fig. 3. Mount St. Mary's Hospital. The organ loft of the chapel.

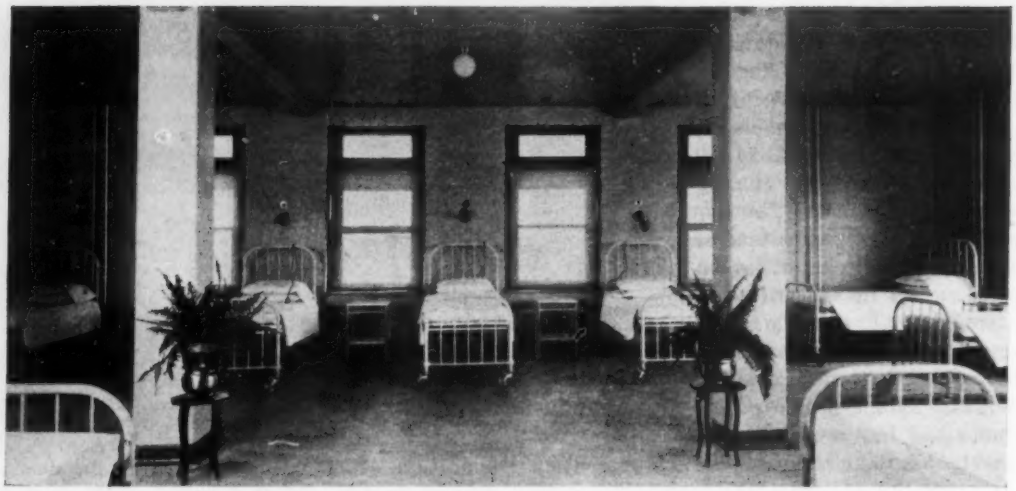


Fig. 5. Mount St. Mary's Hospital. A ward.

pulous attention to cleanliness is everywhere observed.

On the main floor are located the public waiting rooms, reception halls, offices and auxiliaries; record room, with vault and accessories, library and consultation room for attending physicians. On this floor, too, besides the regular private rooms, are a day room for convalescent patients, a pharmacy, with an electric dumbwaiter communicating with all floors above, and an observation room where patients pending diagnosis are kept under observation and later distributed to the wards as may be directed. The main corridor of this floor, as of all floors throughout the entire institution, opens into sun parlors for the use of private room patients.

On the second floor is the beautifully exposed room for the care of children, opening out on a sun veranda.

The fifth floor opens into a roof palm garden. Here guests may gather in large numbers; informal entertainments are held here. From the three roof gardens, as from the many windows of the large solarium, are to be had charming views of Niagara's wonderful scenery. Access to these gardens is obtained by direct elevator service from each floor.

On the sixth floor, off the arcade, are located the laboratories, with conveniences and apparatus for careful and accurate study. This location has been selected with the object of getting rid of the disagreeable features attending scientific research, and at the same time obtaining the needful light and the desired seclusion for successful work. On this floor is the nurses' class room and recreation hall, with direct elevator service, and entirely segregated from the hospital department.

The maternity department is located in the eastern section of the central building, as far as possible from the main corridors.

The service building has been planned with no less care than the buildings in which the patients are housed. Besides a sub-basement, which is primarily the boiler and engine room and ice plant, with space required for the apparatus connected with them, it has a basement and four stories above. It contains a model laundry equipment, with steam washers, centrifugal extractors, "conveyor," dry room and a variety of modern finishing devices. Adjoining the main work room is a special receiving room for material requiring preliminary disinfection. There is also a large steam and formaldehyde disinfecting chamber for clothing and mattresses. Store rooms, fan rooms, dining rooms, etc., are located on this floor. Corridors

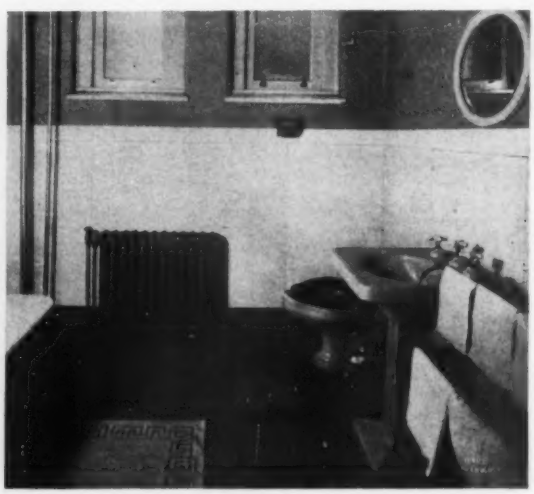


Fig. 6. Mount St. Mary's Hospital. Bathroom of a private suite.

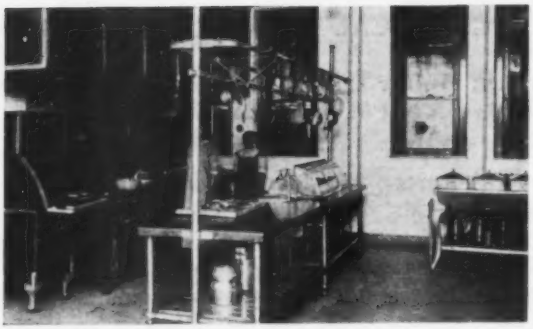


Fig. 7. Mount St. Mary's Hospital. The kitchen.

connect with elevators, and any department desired can be reached directly without crossing through or interfering with any intervening department.

The nurses' home and training school, declared to be one of the most beautiful and best equipped of its kind, is a separate building. The training school has room for sixty students. It already has a large waiting list of applicants.

It was with full appreciation of the remarkably soothing effect of music upon the mind and nerves of hospital patients that provision was made, in the planning of the building, for the installation of the famous Choralcelo organ.

This wonderful musical instrument, the first of its kind ever installed in such an institution, marks a distinct epoch in the history of music. It produces the first faultlessly pure tone the human ear has ever heard. Through it for the first time in all the ages Nature finds her full voice, for it is she, literally, who makes its tonal marvels. By the agency of electricity a periodic tension is produced in the ether in the vicinity of the string, reed, bar, diaphragm or other sonorous body which is to be made to sing, and this body sympathetically and without contact gives off a synthetic tone all of the parts whereof are purely Nature's work, and therefore perfect. When in this manner a string speaks the result is all the harmonies which can concordantly coexist, and to produce any particular instrumental effect one has only, as it were, to chip off the required portion of this great synthetic mass of tone. Though the tones are many of them sustained, like the organ, they are radically different in all other respects, suggesting rather an idealized orchestra.

The tones are warm and passionate, free from that coldness which invariably characterizes even the most beautiful wind tones; and as the sound is electrically controlled, every possible gradation of quality and loudness is readily obtained. The Choralcelo player mixes his tonal colors as an artist mixes his hues upon his palette. He may, as it were, pull the whole of a stop, or any part of it, and he does not have to produce his soft tones by smothering loud ones in a swell-box. The low tones of the Choralcelo are elemental, its middle range jubilant, its upper register thrilling, and the whole effect celestial, whence its name, Choralcelo—Celestial Choir. So varied are the capabilities of this epochal instrument that it not only has the flexibility, range and volume of a great pipe organ, but it produces also violin and piano music, either separately or together, giving the latter case the effect of a great and etherealized orchestra.

The Choralcelo at Mount St. Mary's consists of a master instrument and eight subsidiary instruments, or "echoes," as they are called, placed in various parts of the building, so that at will the organist may flood with celestial harmony the entire structure, or any selected part thereof, and produce the most entrancing antiphonal effects.

This wonderful instrument, which gives Mount St. Mary's a distinctive position among all similar foundations in this country, originated with Mr. Melvin L. Severy, of Boston, and is the culmination of scientific work extending over more than a quarter of a century. It is the last word in tone and the herald of an entirely new musical dispensation.

At Mount St. Mary's will be found every form of comfort and entertainment that tends not only to restore vitality and build up health, but that will make one's stay here a period to look back upon with great satisfaction and pleasure. While not a hotel in the strictly commercial sense, Mount St. Mary's provides more of the necessary comforts and needs of those whose health requires upbuilding than may be found in most of the modern hotels or sanitariums.

Mention of Mount St. Mary's would be incomplete without a word concerning the chapel. The splendid marble altars were built in Rome. Their pure white and gold and the dark mahogany of the pews form a contrast of wondrous harmony in the subdued light of the beautiful memorial windows.

A bond issue including $125,000 for improvements at the Kansas City General Hospital was passed at an election held June 1, by a majority of nine votes for to one against the proposition. The money will be expended for two new wings to the hospital, one for the housing of interns and nurses, and the other to serve as a special ward for the treatment of genito-urinary diseases and drug addictions. This move is only a part of Kansas City's general scheme to add to her municipal hospital facilities. The Emergency Hospital is being remodeled and enlarged, and in the future will include a tuberculosis clinic and the necessary laboratory services. A new tuberculosis sanatorium, being erected at a cost of $150,000, will soon be opened, and efforts are being made by prominent women of the city to raise funds for the establishment of two convalescent homes in connection with the general hospital.

SIMPLIFICATION AND STANDARDIZATION OF SURGICAL TECHNIC IN HOSPITALS

Uniformity in Procedure Makes for Better Results; Better Training for Surgeons, Interns and Nurses; Economy in Apparatus and Energy—A Set of Rules and House Orders

By W. L. BABCOCK, M. D., Superintendent the Grace Hospital, Detroit

A SEARCH through the attics and store rooms of the older general hospitals of the country develops the fact that these rooms constitute the graveyards of great quantities of discarded operating room equipment and a variety of surgical appliances and instruments that the surgeon of the younger generation would have difficulty in identifying. These museums of an early day are receiving constant additions of a character that lend interest to the statement that not all of the equipment stored therein ever justified its existence. Many instruments and much equipment was experimental and exhibits a constant reaching out after better material, more serviceable surgical tools and much ingenuity in mechanical adaptation. If these collections were brought together, it is probable that the exhibit of discarded operating room tables alone would tax the capacity of the Smithsonian Institution.

As new operations have been planned and described, new instruments and equipment have appeared, until the material stock inventory of a well equipped hospital represents the expenditure of many thousands of dollars. It can be demonstrated that many hospitals have suffered financially from the whims and fads of surgeons in the matter of equipment. Most hospital superintendents of not many years' experience can recall many items of expenditure for apparatus and equipment which was used but once or never used at all.

Standardization of the work of various departments of general hospitals has been a subject of close study in many institutions for the past two or three years. A considerable advance has been made in the standardization and purchase of supplies through a central purchasing bureau, which has its office in New York City and is known as the Hospital Bureau of Standards and Supplies. Forty of the largest general hospitals of the country are members of this Bureau and control its organization through an executive committee. A saving of many thousands of dollars per year to the hospitals of the country and the establishment of a uniformity of quality and grade in supplies has resulted.

The hospital with which the writer is connected has an exceedingly large and active surgical service. From six to thirty major operations per day, or about five thousand per year, are carried out, together with the necessary minor work and dressings that follow. Six operating rooms are busy six days in the week for an average period of four to six hours. A large surgical staff is connected with the hospital and in addition outside physicians, whose surgical training qualifies them for the work, are permitted to operate on private patients. A diversity of methods, technic and equipment has resulted. In years past surgeons visiting the Mayo clinics or the clinics of New York, London, Berlin or Vienna, would return with a variety of new methods and frequently suggest new equipment for trial. A closed hospital with its limited attending staff can readily put into practice uniform methods of work that soon become characteristic of the hospital. The more numerous points of contact from the surgical department of the open hospital and the lack of unity in the methods of its operators has resulted in much confusion and many unnecessary expenditures. A candid statement of this subject brings out the confession that the situation as detailed has not made for efficiency.

No departments of hospital work have been managed with less efficiency from the standpoint of cost and uniformity than the surgical departments of general hospitals. It is known that many large general hospitals carry out in their operating service several technics concurrently. Naturally this diversity in operating room methods makes it necessary to carry a large variety of surgical material and supplies, much of which is interchangeable. For example, many general hospitals sterilize rubber gloves both by dry heat and by boiling, according to the preference of the operator. Catgut, horsehair, silkworm gut, silk, kangaroo tendon, etc., are used for one and the same purpose at the whim of the operator. Vaginal and local operations are frequently carried out in one and the same operating room on the same day by both the dry and the wet methods. The use or non-use of sterile fluids or antiseptic solutions in irrigating designate the method.

The benefits accruing from the standardization of operating room technic has resulted, where introduced, in much saving of time and in greater convenience to the surgeon. "We waste the time of our nurses when we require them to learn a dozen different ways to do their work in the operating room or in the wards because we have not discovered or outlined the one best way of doing the work and adopted it as a standard method of

procedure." The hospital, therefore, is not the only agency benefited by uniformity in methods.

In order to carry the efforts toward uniformity and simplicity to their logical conclusion, it is necessary in a general way to provide the following:

1st. The adoption of a brief outline of "house orders" for the preparation of the patient for operation.

2d. The adoption of an outline for the uniform care of the patient following operation.

3d. The adoption of uniform operating room methods for the preparation and sterilization of cotton, gauze, ligatures and general supplies.

4th. The adoption of a uniform surgical technic by the surgeons in all general operative cases.

The outlines or schedules adopted should be printed and brought personally to the attention of all surgeons operating in the hospital. The methods and technic necessarily should be methods that have been tried out and found safe and satisfactory in actual practice.

With the above generalizations in view, the surgical staff and superintendent of the Grace Hospital last year, after many weeks of study and experimentation, adopted schedules for the surgical work of the hospital. The following suggestions to operators were agreed upon by the attending surgical staff, put into practice, and called to the attention of all other surgeons operating in the hospital:

That all surgical patients, save emergency cases, be sent to the hospital as early the day preceding operation as possible.

That in abdominal operations all operators dispense with gauze sponges for use in abdomen and use only the large gauze towels. Loss of sponges in the abdominal cavity will be obviated by the use of towels, and the operator will soon become accustomed to their use.

That small sponges never be used in the abdomen except on a sponge holder.

That gauze drainage be dispensed with.

That cigarette drains or rubber tubes, enclosing wicking be used.

That irrigators and basins containing solutions be dispensed with in the operating room.

That gloves be worn dry.

That the only solution used in the operating rooms shall be dilute alcohol.

That 20 minutes be allowed to prepare room for next operation.

That the preparation of the skin for any operation be carried out by sponging with 3 percent solution of iodine.

That operators shall report in operating room 15 minutes prior to operation and be prepared to operate on schedule time.

That irrigation in vaginal cases be discontinued.

That in operations on cervix and perineum the vagina be sponged only with 2 percent solution of iodine.

That operators lock their instrument cases and lay out instruments only with the help of the instrument nurse.

That operators furnish their own rubber gloves, except for use in staff operations.

That the operating room supervisor be notified the day previous of special material or supplies needed for operations.

That physicians do not talk or congregate in rotunda or visit in the operating room corridor.

That physicians be on time for use of dressing room.

That lay visitors and relatives of patients be not admitted to operating room floor or operating rooms except in emergencies.

That the keynote of technic be simplicity.

That whims and fads be abandoned.

That operating room technic be standardized.

Standard scrub for hands and arms. Scrub with soap and water two minutes, trim nails to 1 m. and then scrub with soap and water 5 minutes; finish with dilute alcohol. Dry hands and use gloves dry with sterile powder.

The surgical staff adopted a schedule of standing "house orders" which were put into effect at once, as follows:

THE GRACE HOSPITAL STANDING HOUSE ORDERS

ADULT CASES ONLY—PREPARATION OF PATIENT FOR OPERATION

Castor oil, 1 ounce at once, except cases of intestinal obstruction or acute appendicitis.

Temperature per mouth, at four-hour intervals in acute cases. If doubtful, then take temperature per rectum.

Pulse and respiration, at four-hour intervals in acute cases.

Shave entire region of operation, giving wide margin; follow with hot bath.

Only fluids for the evening meal.

Send specimen of urine to laboratory.

LOCAL PREPARATION OF REGION OF OPERATION

Wash with soap, warm water and sterile gauze 5 minutes, using three changes of warm water. Rinse with sterile water.

Wash for 2 minutes with 50 percent alcohol on sterile gauze.

Apply sterile, dry dressing, covering whole area and strap in place with one-inch strips of adhesive plaster.

Vaginal cases to have 2-quart warm water douche with ½ percent Tri-Kresol.

MORNING OF OPERATION

Simple suds and water enema if bowels have not moved well.

Only water by mouth before operation.

Adult patients to receive one-half hour before operation 1-6 gr. morphia and 1-150 gr. atropin hypodermatically unless otherwise ordered.

Urinalysis on chart before time of operation.

Rinse patient's mouth with antiseptic solution and clean teeth with sterile gauze or tooth brush before time of operation.

The nurse shall see that all female pelvic and abdominal cases voluntarily empty bladder 15 minutes before leaving for operating room. If not voluntarily emptied, then catheterize unless otherwise indicated upon the chart by surgeon. Male patients shall not be catheterized unless special orders are written on chart by attending or house surgeon.

If the physician in charge of the patient, or an intern acting for him, shall write "House Orders," name and hour

of operation on patient's chart, the above orders shall be carried out. Orders other than the above shall be written in full detail.

CARE OF PATIENT FOLLOWING OPERATION

The anesthetist shall accompany patient to the bed and before leaving shall see that he or she is in a fair way towards recovery from the anesthetic.

The bed shall have been previously warmed.

All hot water bottles shall have been removed from the bed when patient is returned from operating room.

The nurse shall remain until patient is conscious.

Morphine 1-6 gr. hypodermatically; one dose only may be given to adult patients if necessary to control pain. Thereafter morphine shall not be administered without a physician's order.

Water (hot or cold) may be given as patient requests in quantities tolerated.

Only water or weak tea shall be given in the first 24 hours.

Fluids shall be gradually increased in the second and third 24-hour periods as may be borne by the patient. In the second 24-hour period broths and other liquids may be added.

Vomiting—A nurse shall attend the patient to care for vomited material and make the patient comfortable.

In cases of persistent vomiting, rapid pulse, high or low temperature, the house and attending surgeons shall be notified. In case the attending surgeon cannot be reached, the house surgeon shall wash out stomach.

Gas and mild grades of intestinal paresis shall be relieved by an enema consisting of a pint of suds and water.

These rules do not apply to nose and throat, eye and ear, and special operations.

The above "House Orders" were adopted by the Surgical Division of the Attending Medical Staff, December 19, 1914.

These schedules have been in use several months and have greatly simplified the work of the nurses in preparing patients for operations and in the after care of surgical cases. It is true that not all surgeons have as yet fully adopted all of the suggestions made in the schedules. Many who did not originally conform to the schedules have since followed the outline after observing the good results and increased simplicity of the standard routine.

The personal observance of the simplified technic in actual practice should have a tendency to produce a good psychical effect on the fussy operator, especially coupled with the knowledge that these simple methods are followed with excellent results from a surgical standpoint. The occasional operator, as well as the surgeon who is not a member of the staff, have been benefited in their work by the inauguration of simplified and sane methods of procedure.

I wish to emphasize that this standard outline applies only to general surgical operations, such as abdominal work, amputations, head injuries, etc., and does not apply to special operations on the eye, ear, nose and throat and certain genito-urinary operations. From the standpoint of the hospital it is saving many hours of time for the intern and nurse and many dollars in supplies. The experiment has demonstrated that this uniformity can be extended to other departments of hospital work, such as the laboratory and x-ray departments, and, to a limited extent, to the medical departments. As an illustration of the increased simplicity, it is necessary only to detail that, in order to have a patient prepared for an abdominal operation, the surgeon simply writes "House Orders" and the date of the operation on the patient's chart.

NEW YORK HOSPITALS GET FUNDS

Hospital Saturday and Sunday Association Makes Distribution of More Than $100,000 to Forty-one Hospitals

The following table gives in round numbers the amounts received by hospitals in this association on the new basis of distribution which takes note of the cost, within the conservative limits, as well as the number of free days of service:

GENERAL HOSPITALS

Mt. Sinai	$9,519	Flower	$1,334
New York	8,061	Sydenham	1,302
St. Luke's	7,490	French	1,068
Post-Graduate	5,898	Hahnemann	1,047
German	4,783	St. Mark's	1,001
Roosevelt	4,746	Knickerbocker	885
Lebanon	2,952	Volunteer	400
Lincoln	2,868	Har Moriah	362
Beth Israel	2,624	Red Cross	250
Polyclinic	1,755		
Total			$58,355

SPECIAL.

Orthopedic	$4,648	Knapp Memorial	$ 370
Ruptured and Crippled	2,959	Skin and Cancer	1,658
Deformed and Joint Disease	914	General Memorial	1,495
Eye and Ear Infirmary	1,903	House of Rest	2,148
Man. Eye, Ear and Throat	1,825	Neurological	250
Ophthalmic	757		
Total			$18,931

WOMEN AND CHILDREN

Lying-In	$4,498	Woman's	$1,970
St. Mary's	2,685	Sloane	1,433
Infirmary for Women and Children	2,095	Man. Maternity	983
Babies	2,037	Misericordia	734
Nursery and Child's	1,572	Jewish Maternity	374
		Hospital for Women	363
Total			$18,749

INCURABLES AND CONVALESCENTS

Montefiore Home	$9,525	Isabella Heimath	$1,327
Home for Incurables	1,956	St. Andr. Conv.	281
Holy Comforter	871		
Total			$13,963

Legal Hurdles

They are having a great time in England in their attempts to carry out the Workman's Compensation Laws. Recently it was decided by the court of last resort that if an employee worked for more than one employer during the time the disability was in course of acquisition, as for instance miner's nystagmus, the last employer could compel all the other employers for whom the man worked to contribute pro rata toward the award of disability compensation. Now one of these several employers has come into court with the claim that in his colliery, because of its sanitation and safety conditions, the employee could not have contracted that disease. The trial court had come upon a new problem "at law," and sent the case below for trial on this particular issue.

"How shall we try the case?" asked one of the counsel.

"Do the best you can," naively replied the court.

DR. GRENFELL'S WONDERFUL WORK IN LABRADOR

Five Hospitals and a Hospital Ship Now Help to Cure the Sick, Heal the Hurt and Teach Sanitation and Hygiene

By S. EMMA DEMAREST, Executive Secretary of the Grenfell Association of America

THROUGH Dr. Corner's able article in your magazine on "Hospital Work on the Labrador Coast," your readers have become somewhat familiar with Dr. Grenfell's mission work, especially with that of Battle Harbor Hospital. I would like to mention some other phases of the work which show how, in a brief score of years, by unwearied efforts, by sympathetic understanding of existing conditions, by fair-mindedness and prophetic vision, Dr. Grenfell has assisted in developing the social, economic, educational and religious life of these isolated people, and has been the means of bringing medical aid and instruction in sanitation to those who before his coming never had an opportunity to test the power of medicine and surgery.

There are now five flourishing small hospitals connected with our Mission—three situated at points of vantage about two hundred miles apart along the Labrador coast, and two on the northern Newfoundland coast.[1] All of the Mission work naturally seems in a way to center about St. Anthony, for Dr. Grenfell lives at St. Anthony and the inspiration for all sorts of effort in many directions emanates from him.

Our largest hospital, with the noted surgeon, Dr. John M. Little, Jr., of Massachusetts, is located at St. Anthony. This hospital is open all the year. Here in the summer months the Harvard Odontological School maintains a laboratory and a specialist in dentistry from July 1 to September 1. This hospital has a well-furnished pathological laboratory. It is also equipped with an x-ray outfit. It is to this hospital that most of the noted specialists come for the summer months. Dr. Andrews, a noted oculist, has for the past four summers given his services and is planning to return the coming season. Dr. John D. Adams of Boston, an orthopedic specialist, performed some wonderful operations and cures last summer.

The anti-tubercular work is carried on in tents and shacks as well as open-air balconies. This is true of all the hospitals.

The hospital returns for the year 1914 show:

PATIENTS TREATED AND CARED FOR

	Cases
Out-patients	6,855
In-patients	490
	7,345

MEDICAL AND SURGICAL WORK DONE

Out-patients (visits)	12,317
In-patients (days hospital care)	10,313
	22,630

OPERATIONS UNDER ANESTHETICS

Out-patients	41
In-patients	198
	239

AVERAGE STAY OF AN IN-PATIENT IN HOSPITAL

Days	21.05

MISSION RESPONSIBILITIES WHEN ALL HOSPITALS WERE OPEN

Average out-patients per day	62.32
Average in-patients per day	39.07
	101.39

The Orphanage, or Children's Home, at St. Anthony, built by a young volunteer while he was still in college, who recently married the daughter of the President of the United States, accommodates about sixty orphans and children from destitute homes, of whom Dr. Grenfell has assumed the care. They are a happy, hearty lot of youngsters and improve rapidly under the gentle care of the good women who have them in charge.

The Strathcona. Dr. Grenfell's hospital ship.

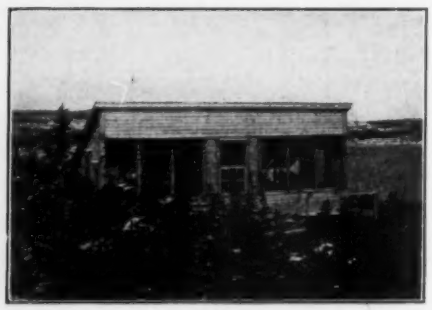
St. Anthony is also the headquarters of the educational and industrial as well as the medical part of the Mission. The only public and undenominational school is established here. The day school is in session the entire school year, and the

[1] There are also cottage hospital stations on the Labrador at Forteau and Spotted Islands.

The hospital at St. Anthony, Northern Newfoundland. Dr. John M. Little, Jr., surgeon, in charge.

teacher for the past two years has held a night school for the older young men and young women. In the summer months a kindergarten class taught by a volunteer has revolutionized the lives of the smallest children by teaching them to play —something hitherto unknown to them.

For several years teachers have given their services to schools in the out-ports of Labrador and Newfoundland. Last year schools were held in six little centers where there had never before been schools. These teachers sometimes have to teach as many grades as there are pupils in the school. Board is found with some native family. These native houses are very small and accommodations are somewhat pinched at times. One of our young men who is about six feet tall said that his cot completely filled the side of his room from wall to wall and he was obliged all summer to lie doubled up, jack-knife fashion. We hope the coming summer to send teachers to a dozen settlements.



Tuberculosis shack, St. Anthony.

Thanks to the indefatigable enterprise and zeal of Miss Jessie Luther, of Providence, R. I., a volunteer worker for many years, classes in textile industry have been established. The output of these classes is so excellent that the woolen rugs and homespun cloth woven by the girls and women have taken prizes in open competition in St. John's. Beside the weaving, Miss Luther also teaches basketry, carving, and modeling in clay. There is a small but complete pottery, with potter's wheel and kiln, and there is plenty of clay in the neighborhood. A sale of articles made under the guidance of Miss Luther was held a few weeks ago in New York. Many friends attended and all were very enthusiastic over the fine workmanship displayed. The rugs especially met with high praise and commendation. An expert buyer from one of the largest carpet houses in the city examined the rugs and this firm offered to take for sale all that can be made under Miss Luther's direction. The homespun cloth, too, met with favor, many men purchasing it for suits.

Through the kindness of Pratt Institute some of the older boys of our Mission have had a technical education and have returned to be our electricians, plumbers, carpenters, house-builders, etc.

A co-operative lumber mill at Roddickton provides employment for men and boys during the winter months and saves many from hunger and debt when fishing and hunting fail. Windows and doors for the new Mission buildings are made at this mill, and many vessels designed by our boys have been built and sold and after launching they have been granted the bounty for a sound craft by Lloyd's surveyor at St. John's.

Tuberculosis tent, St. Anthony.

The co-operative stores, though not a part of the financial responsibilities of the Mission, are certainly valuable for their influence in developing the thrift of the people. The lessons of cash trading are nowhere in the world more needed. At stations miles apart small centers for cash dealings are doing well.

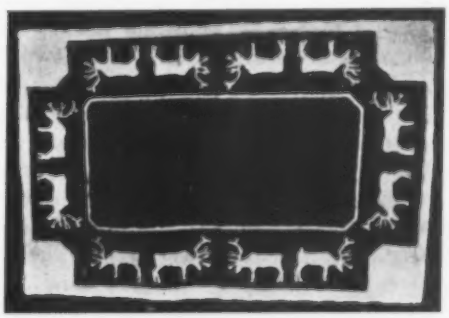
Indian Harbor Hospital. Fresh Air Shack.

Dr. Grenfell's practice lies over two thousand miles of fog-laden, badly charted, rock-bound coast. He covers this distance in his little hospital steamer, Strathcona, at least once, and often twice every summer. It would be difficult to magnify the amount of work accomplished in this way or to exaggerate the value of Dr. Grenfell's services. Through the "tickles," as the narrow straits are called, down into the fiords, across stormy, ice-covered bays goes the steamer on her errand of mercy and healing. Sometimes these touch-and-go visits of the Strathcona afford the sole opportunity many of the "liveyeres" have to secure medical or surgical aid. The approach of the Mission ship is hailed by the fishing fleet with the greatest enthusiasm. The trapboat dancing over the waves shouts or signals her a welcome. The inhabitants of the little settlements along the coast, on the arrival of Dr. Grenfell, hasten to the

Harrington Hospital, Labrador.

Pilley's Island Hospital.

landing place to meet him. The work done, the aid given, the comfort and cheer carried to these remote corners of the earth cannot be calculated. Patients are taken to the Strathcona, or Dr. Grenfell goes ashore. Serious cases are taken aboard the Strathcona and hurried to St. Anthony or Battle Harbor. This hospital ship is without doubt one of the most important factors in the



The reindeer rug.

work. The string of hospitals, St. Anthony, Battle Harbor, Indian Harbor, Harrington, are the fingers, the Strathcona is the thumb, of the helping hand taking so much light and cheer to these isolated fisher folk.

In St. John's, Newfoundland, there now stands the realization of Dr. Grenfell's dream for his brother seamen. When the seamen, sealers and fishermen visited St. John's every year they had no satisfactory place to board or lodge during their stay. A place was needed where these men when on shore would receive a hearty welcome and enjoy wholesome entertainments, where they could "kill time" comfortably and peacefully and be free from the many temptations of saloons and evil resorts. Right in the midst of the busiest wharves and docks, within easy access of all steamers, is built the Seamen's Institute, which has so soon amply proved its need by the large patronage it has received from the day it first

Indian Harbor Hospital.

opened, December 19, 1912. It has more than paid its running expenses. Especially popular have been its restaurant, bowling alleys, billiard room, library and reading rooms. The swimming pool, too, has been an untold blessing, for in this land, inhabited pre-eminently by fisher folk, the art of swimming has been an unknown accomplishment; the waters were too cold to permit of their learning to swim. Just at present the government recruits are having their first lessons in swimming. Dr. Grenfell says, "Once men were satisfied with telling other men they 'ought to be good'; now we know Christ meant us to have the fun of making it easier not to go to saloons and haunts of evil by providing better places for them." Under the management of a board of prominent ladies the upper floor of the Institute provides a home at a moderate price for girls and fishermen's wives while visiting the city or seeking employment. This department, too, has been very popular and has closed the year free from debt. This splendid work among the Labrador fishermen, begun by one inspired man, has grown to dimensions of international importance.

In order to give permanence to Dr. Grenfell's work and to lift from his shoulders a burden too heavy for any one man to carry, about a year ago the International Grenfell Association was incorporated under the laws of Newfoundland. This Association is to provide funds for and to administer the various activities of the Mission. It consists of two representatives or directors from each of the following associations: the Royal National Mission to Deep Sea Fishermen, of London, England; the Labrador Medical Mission of Canada; the Newfoundland Grenfell Association; the New England Grenfell Association, and the Grenfell Association of America.

In the fall things looked very dark for the upkeep of the Mission. Of the countries helping to support this great philanthropy the United States is the only one not engaged in war. Even from here funds came in very slowly, for the war affected business and dividends were in many instances unpaid. Many friends who were in the habit of making generous donations were obliged to curtail their gifts or found themselves unable to give at all. In order to economize to the maximum, Dr. Grenfell shut up four of the hospitals for the winter months to save the expense of heating. This made it necessary for the

The Summer Staff at St. Anthony, 1914. From left to right—Standing, Drs. Adams, Ashland, Alton, Grenfell, Little, Janney, Andrews and Mr. Martin; and on the extreme right, kneeling, Dr. Mallett. Nurses—Misses Alexander, Root, Dorsey, Bowen, Bates, and seated on the ground, Miss Rogers and Miss Leininger, with Jack, of Ice-Pan fame.

doctors and nurses to take long dog-sled journeys to the homes of their patients. The school-house also was closed, school being held in the Orphanage.

Our New York office sent a considerable amount of money for immediate relief. We are glad to say that funds are coming better of late and the outlook is much brighter. In a note received from the Doctor recently, he says there was a very late catch of fish, a larger catch than is usual in the early season, and the people, who had been threatened with starvation because of the failure of the earlier catch, are now more comfortable.

ADVANTAGES OF COOPERATIVE PURCHASE OF SUPPLIES FOR STATE HOSPITALS THROUGH A CENTRAL COMMITTEE[1]

Superintendents of the Institutions Forming a Purchasing Bureau Are Held Responsible by Their Own Boards—Uniform Requisition Forms Make for Simplicity and Allow Comparisons—Some Forms That Have Been Found Serviceable

By ARTHUR P. HERRING, M. D., Secretary Maryland Lunacy Commission

An excellent feature of the methods of purchase adopted by the cooperative purchasing committee of the State of Maryland consists in the fact that the superintendents of the various institutions form the purchasing committee and are held responsible by their respective boards for the careful and economical purchasing of supplies. Supplies are purchased quarterly, with the exception of coal, which is purchased during the month of April for the ensuing year. Coal is bought on the British thermal unit (B. t. u.) basis, as determined by the Bureau of Mines, Washington, D. C. This coal must come up to a certain standard. Any variation, either above or below the standard, controls the price, the hospital paying a premium if the coal is better than specified, or receiving a rebate if the coal is not up to the standard. If there is any marked reduction in quality, the coal is returned and the contract is annulled.

The following schedule has been arranged as being the most convenient way for grouping the supplies for quarterly purchasing:

For the quarters beginning June, September, December, March: groceries, laundry supplies, paints and oils, rubber goods, curled hair, tobacco, cigars and pipes.

For the quarters beginning July, October, January, April: dry goods, house furnishings, drugs and chemicals, tin shop supplies, engineer's supplies, broom shop supplies, furniture.

For the quarters beginning August, November, February, May: notions, blacksmith's supplies, hardware and carpenter's supplies, clothing, boots and shoes, leather and shoe findings.

In November Christmas supplies also are purchased.

Requisitions for articles included in any of the above classifications required for the quarter are sent to the office of the purchasing committee on the fifth of each month. (See Form 6.) Upon the receipt of these requisitions from each institution, Form 9, known as a total sheet, is prepared, on which are entered all the different articles (by specification numbers) for convenience and accuracy, the amount required by each hospital and the total of each item estimated. From this total sheet there is then prepared on Form 3 a request to bidders containing the items upon which the firms are to bid, giving the specification number and the name of the article in brackets, but without a full description, and the total quantity wanted, with the unit to be used. The name of the institution does not appear on this sheet.

For the purpose of illustration, a few items of groceries may be considered. Printed specification sheets have been prepared and placed in the hands of the bidders, which describe fully each article in order that the bidder may know exactly what he is to bid on. Each article is given a specification number, for instance, under Groceries, No. 1a refers to "Sugar (fine granulated)", No. 2a, "Coffee (Bourbon Santos)," etc.

Each institution is furnished from this office with a full set of specification sheets covering every classification, and is always required to order articles by specification numbers, which greatly expedites matters and insures uniformity. Each institution also has a copy of the schedule governing the purchase of supplies, and each month upon a given date it must send to the cooperative purchasing committee a list of the articles required as supplies for the next three months. The list of articles under the different classifications is very large, and is intended to cover every supply that has been used or will be

[1] This is the fourth in a series of eight papers on "The Government of State Hospitals for the Insane"; last month, "The Business Organization"; next month, "Organization of the Domestic Departments."

required in the hospitals. If, however, an article is wanted by the hospital which does not appear on the specification sheets, such articles may be

Form No. 6.

REQUISITION

December 3rd, 1914.

NAME OF HOSPITAL EASTERN SHORE STATE HOSPITAL
CLASSIFICATION GROCERIES
QUARTER BEGINNING January 1st, 1915

ORDER BY SPECIFICATION NUMBERS ONLY
USE CORRECT UNIT

CO-OPERATIVE PURCHASING COMMITTEE,
Room: 512 Garrett Building,
Baltimore, Md.

Gentlemen:
The following items of GROCERIES will be needed by this Institution for the quarter beginning January 1st, 1915.

Specification Number	QUANTITY	UNIT	DESCRIPTION Brand, Size, Numbers, Lengths, How Packed, Etc.
1a.	700	lbs.	
2b.	100	lbs.	
3a.	25	lbs.	
9.	1	Case	
61b.	2	Bbls.	

Form 6. This Requisition is used by each institution to notify the Co-operative Purchasing Committee of the amounts required for the quarter, using the specification number for each item. These amounts are then entered on Form 9 and totaled.

described fully on the requisition blank, in a column for the purpose, the specification number being left blank, for a specification number to be supplied in the office, and added to the specifications.

In order to explain the system further let us begin with the requisition known as Form 6. These

FORM 9.

TOTAL SHEET

COOPERATIVE PURCHASING COMMITTEE.

CLASSIFICATION: GROCERIES.

QUARTER BEGINNING: January 1st, 1915.

Specification No.	NAME OF HOSPITAL	AMOUNT FOR EACH	TOTAL
1a.	Springfield	23000 lbs.	
	Spring Grove	9000 lbs.	
	Rosewood	5000 lbs.	
	Crownsville	2400 lbs.	
	Eastern Shore	700 lbs.	40100 lbs.
2a.	Rosewood	1000 lbs.	1000 lbs.
2b.	Springfield	6500 lbs.	
	Spring Grove	2900 lbs.	
	Crownsville	600 lbs.	
	Eastern Shore	100 lbs.	10100 lbs.
3a.	Springfield	450 lbs.	
	Spring Grove	700 lbs.	
	Rosewood	90 lbs.	
	Crownsville	10 lbs.	
	Eastern Shore	25 lbs.	1275 lbs.
9.	Springfield	9 cases	
	Spring Grove	15 cases	
	Rosewood	2 cases	
	Crownsville	21 cases	
	Eastern Shore	1 case	48 cases
61a.	Springfield	150 bbls.	
	Spring Grove	180 bbls.	330 bbls.
61b.	Rosewood	20 bbls.	
	Eastern Shore	2 bbls.	22 bbls.
61c.	Springfield	50 bbls.	
	Spring Grove	100 bbls.	150 bbls.
61d.	Crownsville	6 bbls.	6 bbls.

Form 9, the Total Sheet, indicates the gross amount of each item, as well as the amount for each institution. It is only the gross amounts that appear on Form 3, which is sent to the trade; the names of the institutions not appearing.

requisitions are made out by the stewards, who always use the specification number and state the number of pounds, cases, barrels, gallons, etc., required; they are sent to the office of the purchasing committee, where the total sheet, known as Form 9, showing the total number of pounds, barrels, or cases wanted by each hospital, and the grand total, is prepared. From this sheet is prepared and sent out a request to bidders, Form 3, for use in submitting their bids. The full set of

Form No. 3.

CO-OPERATIVE PURCHASING COMMITTEE
OF THE
STATE INSTITUTIONS FOR THE INSANE AND FEEBLE MINDED

DR. J. PERCY WADE, Chairman
DR. A. P. HERRING, Secretary
ROOM 512 GARRETT BUILDING

SPRING GROVE STATE HOSPITAL
SPRINGFIELD STATE HOSPITAL
ROSEWOOD STATE TRAINING SCHOOL
CROWNSVILLE STATE HOSPITAL
EASTERN SHORE STATE HOSPITAL

Baltimore, Md. December 12th, 1914.

Johnson Grocery Company,
765 W. Madison St., Baltimore, Md.

Gentlemen:
Please render us your quotations on the items below, as of before December 21st, 1914 at 12 o'clock noon, in the form and subject to the conditions named on first sheet and in conformity with requirements of Specification Sheet hereto attached.

Respectfully,
Co-operative Purchasing Committee,

NOTE: Read SPECIFICATIONS and INSTRUCTION SHEET carefully and make your BID in strict accordance therewith.

Secretary,
512 Garrett Building.

Specification Number	ARTICLE	Quantity	UNIT	PRICE	AMOUNT
1a.	Sugar: (Granulated)	40100	lbs.		
2a.	Coffee: (Bourbon Santos)	1000	lbs.		
2b.	Coffee: (Rio No. 1)	10100	lbs.		
3a.	Tea: (Black)	1275	lbs.		
9.	Hominy Grits: (Pearl)	48	Cases		
61a.	Flour:(Spring Patent)	330	Bbls.		
61b.	Flour: (Spring Patent)	22	Bbls.		
61c.	Flour: (Winter Straight)	150	Bbls.		
61d.	Flour: (Winter Straight)	6	Bbls.		

Form 3 is mailed to the bidders, upon which they enter their unit price and total amount for each item. Awards are made on each item and never as a whole. Attached to Form 3 are the Specification Sheets, describing in detail the articles desired. Each article is numbered and is referred to by number, instead of the name, i. e., 1a (Sugar), 2b (Coffee), etc. The sealed bids are returnable within ten days on Form 3, with specification sheets attached and the guarantee signed. The prices are then tabulated and the awards made by the committee.

papers going to the bidders consists of the following: A form which gives the rules governing the bids and instructions to aid the bidder to conform to our system. A form is also sent which is in the nature of a guarantee that the bidder will, if required, furnish to the cooperative purchasing committee a bond, with good and sufficient sureties satisfactory to the committee, to guarantee that he will furnish all goods in accordance with the specifications. In Form 3, above referred to, the bidder enters his price opposite each item. The specifications frequently ask for a certain brand of goods or its equal, and in order that it may be known what brand the bidder is bidding on, a column is prepared for that purpose. If this is left blank, it is assumed in each instance that he is bidding on the article specified. By referring to Form 7, tabulation sheet, which represents an

Classification: Groceries.
Date: December 21st, 1914
Sheet No. .....

CO-OPERATIVE PURCHASING COMMITTEE
TABULATION SHEET

Form 7.

Specification Number	Article	Quantity	Unit	Johnson Grocery Co.	A. C. Brown & Sons	D. L. Smith & Bro.	G. Brown & Co.
1a	Sugar (Granulated)	40,100	Lbs.	05	0480	0472	052
2a	Coffee (Bourbon Santos)	1,000	Lbs.	105	123	093	114
2b	Coffee (Rio No. 1)	10,100	Lbs.	09	10	095	0975
3a	Tea (Black)	1,275	Lbs.	18	14	15	12
9	Hominy Grits (Pearl)	48	Cases	1 40	1 37	1 38	1 375
61a	Flour (Spring Patent)	330	Bbls.	5 85	5 90	5 92	6 00
61b	Flour (Spring Patent)	22	Bbls.	6 05	6 08	6 10	6 07½
61c	Flour (Winter Straight)	150	Bbls.	4 90	4 95	5 00	4 98

Form 7, or "tabulation sheet," showing bids received for various supplies.

actual bid, it will be seen, for example, what prices the Johnson Grocery Co. bid for specific brands.

A full set of specifications accompanies each set of papers placed in the hands of bidders, so that bidders can at once determine the class and brand of goods required, how they are to be packed, etc., and the unit to be used. For illustration, although 350 lbs. is reckoned as the average barrel weight of sugar, sugar is purchased by the pound, the pound weight of each barrel being always understood to vary more or less, when billed to each institution. On coffee, the unit is pounds in 100-pound bags. Tea is also bought by the pound, packed in 45-pound chests; hominy grits are bought by the case, there being 60 pounds in a case of pearl hominy grits, or 12 five-pound packages. Flour is bought by the barrel price, packed in either sacks or wood. If in sacks, two 98-pound sacks are reckoned to a barrel, and, if in wood, 196 pounds net.

After all bids are in, tabulations are made of each classification. See tabulation sheet (Form 7.)

Form No. 4.

CO-OPERATIVE PURCHASING COMMITTEE
OF THE
STATE INSTITUTIONS FOR THE INSANE AND FEEBLE MINDED

DR. J. PERCY WARE, Chairman.
DR. A. C. MERRIMAN, Secretary.
ROOM 512 GARRETT BUILDING.

SPRING GROVE STATE HOSPITAL
SPRINGFIELD STATE HOSPITAL
ROSEWOOD STATE TRAINING SCHOOL
CROWNSVILLE STATE HOSPITAL
EASTERN SHORE STATE HOSPITAL

Baltimore, Md., Dec. 22nd, 1914.

Johnson Grocery Company,
745 W. Madison St., City.

Gentlemen:

This is to advise that your firm has been awarded the contract for the following articles of GROCERIES as per your bid submitted December 21st, 1914. We give you below the name of the Hospital and the amount each is to receive and the price, as per your bid submitted. Each article to conform in every way to sample and specifications. Send your bill to each Hospital direct.

Yours very truly,
Co-operative Purchasing Committee,
Secretary,
512 Garrett Building.

Shipping Instructions:
Each Institution will notify you when and how to ship

Specification Number	Total Quantity	UNIT	Name of Hospital	Quantity for each	Price
1b.	10100	lbs.	Springfield Spring Grove Crownsville Eastern Shore	6800 lbs. 2900 lbs. 600 lbs. 100 lbs.	.09 lb.
61a.	330	bbls.	Springfield Spring Grove	150 bbls. 180 bbls.	5.85 bbl.
61b	22	bbls.	Rosewood Eastern Shore	20 bbls. 2 bbls.	6.05 bbl.
61c.	150	bbls.	Springfield Spring Grove	50 bbls. 100 bbls.	4.90 bbl.
61d.	6	bbls.	Crownsville	6 bbls.	5.10 bbl.

Form 4 is to notify the successful bidder that he has been awarded the contract to furnish certain supplies to the institution named, also the quantity and price of each article.

The awards are made by the superintendents and the successful bidders are notified on a form for that purpose that they have been awarded certain articles of groceries. On this form, the specification number, the total quantity, the unit and the name of the hospital, with the quantity for each hospital and the price, are given. Each institution is also notified, on another form, which successful firms have been awarded the contract for such items of groceries as the institution has asked for. Again the specification number is used, with the quantity, the unit, and the name of the firm and the price given. Each hospital, upon receipt of the notification from the office that the awards have been made, orders its supplies on triplicate blank forms; the first sheet goes to the vendor, a duplicate of this (on a blue sheet) is filed in the office of the hospital and a triplicate (on a pink sheet), *without* the *quantity* or *price*, but simply showing the specification number and name of article, is sent to the hospital store-room. All of the three blanks have the same number. When the supplies are received in the hospital store-room, the store-keeper weighs or measures and enters the amounts on the pink triplicate sheets, which are returned to the office of the book-keeper, who checks them up with the invoices and with the original order (blue sheet) to see if the amounts agree. All corrections are made from the office of the purchasing committee.

Supplies are issued from the store-room only upon written requisitions, which are then sent daily to the book-keeper, who enters the amounts in a stock ledger book, or more properly a daily receipt and disbursement account, which shows daily or monthly the amount of stock received, the amount issued, and the quantity still on hand.

If the supplies purchased are not kept up to the specifications, the office of the cooperative purchasing committee is notified and it at once takes up the question with the firms supplying the articles and makes the necessary adjustments. Samples of the supplies purchased are kept in the office of the committee until the goods are delivered and found upon inspection to be up to standard.

Some of the forms of blanks used have been omitted because it is not practicable to present them in reduced form.

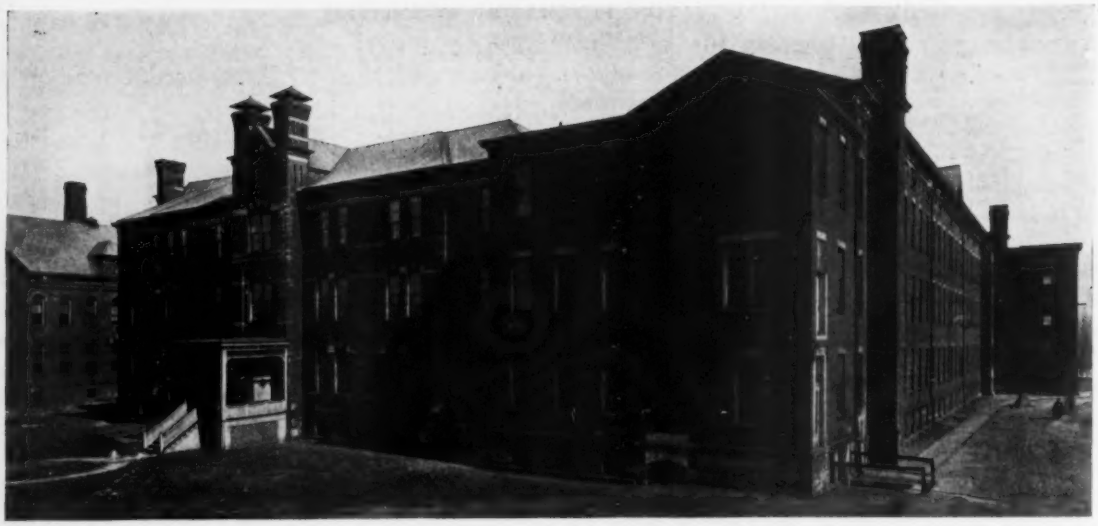


Fig. 1. Venereal Hospital, Cleveland. An old asylum for the insane, made over.

OLD BUILDING TRANSFORMED INTO A VENEREAL HOSPITAL

Structure Originally Built as Asylum for the Insane Worked Over at Small Expense—Some Problems and Their Successful Solution—Individual Basins and Toilets and Shower Baths

By HOWELL WRIGHT, Superintendent Cleveland City Hospital, Cleveland, Ohio

THE first units of a $3,000,000 group of buildings for a new city hospital for the city of Cleveland have been completed. These include an administration building, a service building, a nurses' home and a laundry building.

The old nurses' home, a great, three-story, L-shaped affair, was built more than thirty years ago, to house the insane. Its outer walls, of brick, were two feet thick; the corridor walls eighteen inches; and partition walls, dividing nearly all the space in all three stories of the building into small cells, seven by nine feet, were nine inches thick. Heavy iron bars were built into the structure of all windows.

When this building was transformed into a nurses' home ten or twelve years ago, the window bars were filed off, and a sufficient number of the cell partitions were knocked out, making arch-shaped openings to transform three cells into two small bed chambers and a small sitting room, as shown in Fig. 2.

The matron and training school officers were housed in some small reception rooms at either side of the front entrance. A general parlor or waiting room was made of the front hall, and a large alcove made facing the front entrance.

The main kitchen of the institution was in the basement, at the bend of the "L," and occupied a space about 20x30 feet. A similar amount of space at the same point was set apart on the first and second floors for the nurses' dining rooms, and part of the wide corridor was taken for a dumbwaiter and a small service room for each dining room. There were three toilets with bath on each floor; one at either extreme end of the building and one near the bend of the elbow, as shown in Fig. 2. The floor plans also show the breaking up of the cells to accommodate two nurses in each suite.

When it became no longer necessary to use this building for a nurses' home, it was planned to pull it down and remove it, as was being done with other buildings, to make space for the new hospital group. This building, however, was so massive and in such good general repair, that it was believed that it might be used for some hospital purpose at least for the next few years; the more so, because it happened to be located at a point that would not obstruct the new group.

The city of Cleveland has no venereal disease hospital. The private hospitals have declined to accept these cases, and although the present city hospital has had a department in which a large number of these patients have been cared for during the past few years, its overcrowded condition and its limited space have not enabled it to take care of any substantial proportion of these cases offered for treatment. And yet it was felt

that these are among the most important diseases of a community, and that in the interests of public health they should be segregated and given efficient, aggressive and prompt care.

Under these conditions, it was finally decided that the old nurses' home could be, in some way, transformed into a workable venereal disease hospital. But there were some apparently insurmountable obstacles. The members of the medical staff were quite determined that it would be inexpedient to house venereal patients in a building unless appropriate plumbing equipment could be installed to allow each patient a separate lavatory and a separate toilet. It would cost in the neighborhood of $20,000 to instal this plumbing equipment, and even then, the solid brick walls everywhere would make it necessary to run the plumbing out in the open. The cost, alone, of this plumbing was prohibitive, and the character that the new plumbing must assume was objectionable.

As necessity is the mother of invention, we solved our problem by removing all lavatories that had been used for nurses, and by installing in their place a series of deep kitchen sinks with a single goose-neck outlet for each, controlled by foot pedal movement; one pedal for hot water and one for cold, the two located so close together

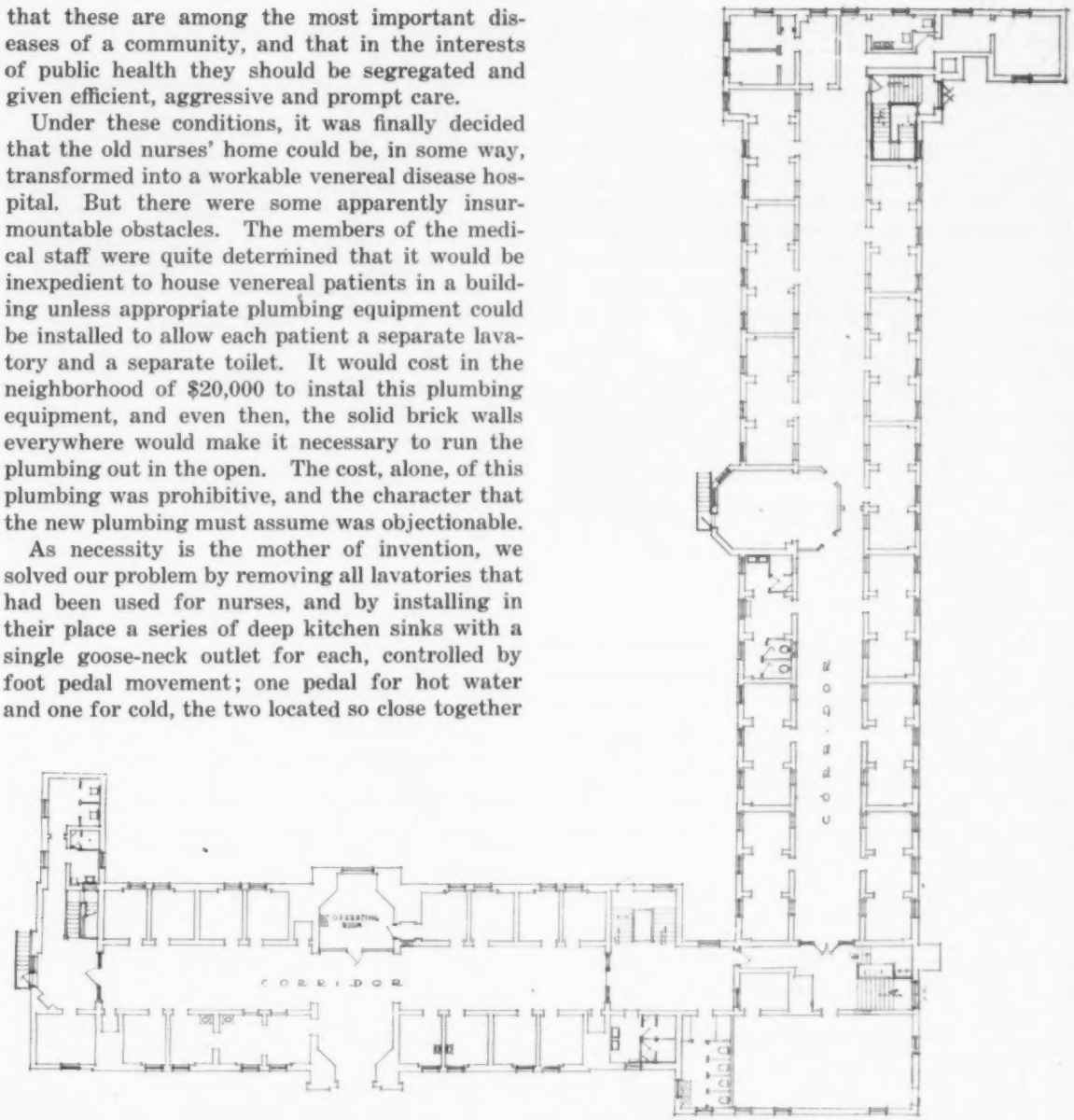


Fig. 2. Venereal Hospital, Cleveland—First floor plan.

that one foot could determine the temperature desired. In this way it is expected that patients can wash themselves without infecting anything. Two showers have been installed for full baths for all patients, no tubs being used. Bed patients are given bed baths. Individual linen and cotton towels may be used, each patient having his own, or paper towels may be used in their place.

The difficulties of individual toilets were a greater problem; this was solved in the manner shown in Figures No. 3 and No. 4. The toilet seat was removed, and in its place was left merely a rod running across the back of the porcelain bowl. A toilet seat was made for each patient, up to the total number of beds to be occupied. A flat, hook-shaped plate was screwed on the under side of each seat, as shown in the detail in Figure 3. Wall racks were made of galvanized metal, with a space or shelf for each seat, and provision for locking each of these shelves was made as indicated in Figure 4. Each toilet seat and each shelf and each lock and each key is numbered, and the key fits only its own lock. The locks are fastened to the cabinet by a loose chain.

The technic of the operation is as follows: each patient has his own key, unlocks his own shelf

and removes his own toilet seat when it is needed, and returns it again and locks it in.

An orderly has a master key that fits all the locks and each day it is part of his duty to remove and clean with an antiseptic solution the toilet seats and also to clean the rack and all of its shelves.

In order to meet the fire necessities, and under the direction of the fire and building departments

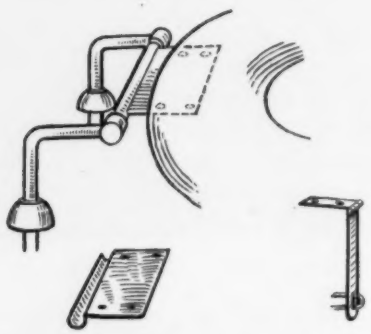


Fig. 3. Method of attaching seat.

of the city, it became necessary to put in extra fire stairs as shown in Figure 2: one at each end of the building and one at the bend of the elbow. It will be noted that outside fire ladders are also shown at two points. There is a third outside fire ladder at the end of the corridor at the top of the "L." Including these inside fire stairs and nine heavy automatically working corridor fire doors,

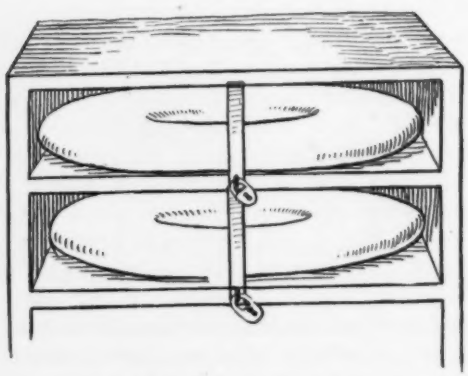


Fig. 4. Method of locking shelves.

allowing the building to be separated into three different parts in case of fire, the whole cost of the reconstruction was less than $10,000; and this included also, a transformation of the reception room opposite the front entrance into a very conveniently arranged operating room, with anesthetizing room adjoining. Small utility and sterilizing rooms have been placed next to the bath rooms in the three sections of the building.

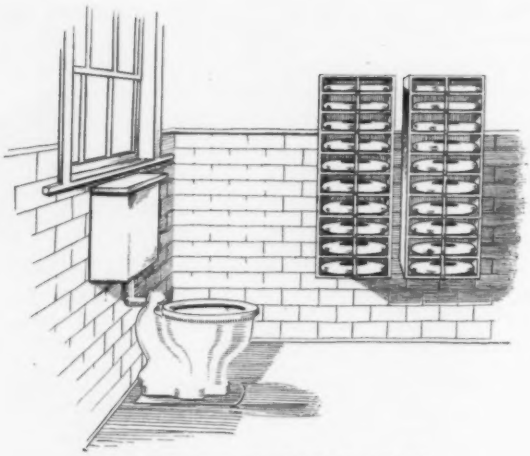


Fig. 5. Toilet room, showing toilet seat rack.

There were many difficulties in the way of making this building habitable, and more especially for the requirements of so special an institution as a venereal hospital, but it is believed that the obstacles have been surmounted and that we have now a perfectly workable, conveniently arranged hospital building.

Columbia-Harvard-Johns Hopkins Staff for New British Field Hospital of Over 1,000 Beds

The laurels being won by volunteer American surgeons in England and on the continent will be multiplied by this staff sponsored by three of our leading universities. Sir William Osler, professor of medicine at Oxford, conceived the idea of having the surgeons for this new field hospital selected by men with whom he had been professionally associated when at Johns Hopkins. It met with Lord Kitchener's approval, the universities were cabled, and their offer to send 32 surgeons and 75 nurses was accepted by the General Director of the English Army Medical Corps.

Another American field hospital, a duplicate of those used in the American army, recently left Paris for the front. Three Americans, whose identity is not divulged, were the donors of the twenty tents and equipment to France. Six of these tents are of sufficient size to accommodate 200 wounded. Columbia and Harvard Universities, and Amherst, Williams and Washington State Colleges are represented among the volunteers comprising its ambulance staff.

Japanese Hospital in Paris

A recent issue of *Le Journal* refers to this hospital in the Avenue des Champs Elysées as a corner of the Far East brought by the Japanese Red Cross to Paris. Dr. Shiota, professor of clinical surgery in the University of Tokio, is in charge with a staff of doctors, nurses, dispensers and assistants, numbering thirty, and the hospital is said to be excellently organized. The complete installation, including bedding, drugs, dressings, surgical instruments and sterilizers, was brought from Japan. There are three beautifully equipped operating rooms, a dental service and the latest appliances for radiography and radioscopy. There can be do doubt that the cooperation of the Japanese, American, English and French hospital staffs in Paris will result in a better appreciation of each other's qualities.

A PLEA FOR SIMPLIFIED LABORATORY REPORTS FOR HOSPITALS

Single Sheet for All Forms Has Advantages of Safety From Loss and Less Bulky Character of Case Records

By HOWARD T. CHILD, M. D., Pathologist, Kankakee State Hospital, Kankakee, Illinois

IN considering the various records of hospitals throughout the country, those pertaining to the department of pathology have been seriously neglected. It is only within the last decade that a special department under a trained physician has been adopted by the most progressive of our hospitals.

While I do not desire to say that the clinical laboratory of any hospital should be relied upon wholly, irrespective of the medical men on the staff, I do wish to emphasize the important fact that a distinct and manifest cooperation must exist between these two departments of a hospital.

In the diagnosis of a case the sum total of all findings, clinically, and those of such nature as are determined by laboratory tests, should be carefully considered, both in justice to the patient and to the reputations of the hospital and of the physician to whose care the patient is entrusted.

How shall such findings be recorded? Some hospitals maintain that a special sheet for each examination made in the laboratory be filed, such sheets being of distinctive colors. To illustrate: a white sheet may be used for urinalysis, a blue one for gastric contents examination, a yellow colored sheet for blood tests and count, a purple sheet for sputum, and so on. I am of the opinion, however, that such a system of records is unsatisfactory; there is danger, where several laboratory examinations have been made during the period of the illness, of losing one of the sheets pertaining to a case, and thus missing a link in the record of the progress of the disease. This is especially true in cases of mental diseases, some of which extend over many years. A second objection to this plan is that it makes the history of the case too bulky, especially in chronic cases.

What, then, shall we adopt as a suitable permanent record sheet for our cases, which will overcome these objections? At the Kankakee State

Kankakee State Hospital.

Pathological Laboratory Report.

Case No. ____ Ward. ____ Laboratory No. ____

Name ____ Sex. ____ Admitted ____ Psychosis ____

Date of Examination ____ Examiner ____

URINE

Chemical Examination.

Time voided
Time examined
Quantity in 24 hours
Odor
Color
Reaction
Specific gravity

Albumen: Test used / Results / Per cent present
Sugar: Test used / Results / Per cent present
Bile: Pigments / Acids — Test used / Per cent present
Indican: Test used / Per cent present
Urea: Test used / Results / Per cent present
Uric Acid: Test used / Results / Per cent present

Microscopical Examination.

Organic Sediment: Uric Acid; Urates (Crystalline, Amorphous); Calcium oxalate; Leucine tyrosine; Cystin
Inorganic Sediment: Phosphates (Triple, Amorphous); Blood
Organized Sediment: Cells (Pus, Epithelial, Blood); Casts (Hyaline, Epithelial, Granular, Blood, Fatty); Mucous; Spermatozoa; Micro-organisms
Remarks

SPUTUM

Color ____ Tissue ____ Pus Cells ____
Odor ____ Blood Cells ____
Quantity ____ Bacteria ____
Stain used ____

SPINAL FLUID

Nonguchi test-results
Nonne-Apelt test-results
Lange-Gold sol-result
Microscopic
Cell Count
Amount withdrawn
Clear or Cloudy

WASSERMAN

Blood
Spinal Fluid

Fig. 1. Pathological laboratory report form.

Blood Examination.

Volume per cent red corpuscles ____ Pathological
white
serum
Hæmoglobin method used
Number red corpuscles
white
Staining method used
Normal white corpuscles
Polymucleated neutrophiles
Lymphocytes
Mononucleated
Eosinophiles
Remarks

Myelocytes
Microcytes
Macrocytes
Normoblasts
Megaloblasts
Poikilocytes
Bacteria
Parasites
Special Examinations
Blood Culture
Widal

Stomach Contents.

Meal given
Time given ____ A. M. ____ P. M.
Time removed ____ A. M. ____ P. M.
Residue
Degree of digestion
Reaction
Color
Odor
Free HCl
Combined acids and salts
Lactic acid
Total acidity
Macroscopical examination
Blood
Remarks

Feces Examination.

Time taken
Color
Odor
Constituents
Blood
Bacteria
Epithelial
Mucous
Products

Special Cultures.
(Throat Etc.)

Results

Microscopical Examination of Pathological Tissue.

Fig. 2. Reverse side of report form shown in Fig. 1.

Hospital I devised the accompanying scheme for the reports from the department of clinical pathology. This consists of a record printed on white paper, 11 inches long by 8½ inches wide, which conforms with the size of all history files. The two sides of the paper are used, which provides space for recording the results of the following laboratory examinations: urinalysis; sputum; spinal fluid; Wassermann tests of both blood and spinal fluid; blood, including cell count; stomach contents; feces; and special cultures, as from throat and discharging wounds, etc. In addition there is space for recording the results of any microscopical examination of pathological tissues.

At the top of the front page space is allotted for the name of the patient, case number, laboratory number, sex, date of admission, date of examination and psychosis, together with the name of the examiner.

The illustrations show the character of the examination made and the schedule adopted. I would add that the records of spinal fluid and Wassermann test results were placed on the front page in order to enable the person looking for the data which are so important in so many of the cases admitted to state hospitals, to determine at a glance whether or not there is laboratory evidence of syphilis existing.

In conclusion let me say, first, that much space is thus saved in bulky history files; second, that the entire laboratory examination, from a clinical standpoint, is covered on the one sheet of paper; third, that the danger of losing a special examination sheet, which may have an important bearing on the prognosis of the case, is minimized.

The result of adopting the foregoing form of record should enable one to determine what line of treatment is needed, and what instructions should be given the attending nurse relative to special diet and exercise in any particular case.

MEAT EXTRACTS, PROPRIETARY PREPARATIONS AND BEEF, WINE AND IRON[1]

Original Liebig Formula for Extracts Still the Best—Nutritive and Physiological Value of These Products—Adulterants—Beef, Wine and Iron Delusive as to Value for Food or Medicine

By JOHN PHILLIPS STREET, Chemist Connecticut Agricultural Experiment Station, New Haven, Conn.

PAPER IV

THE use of meat extract as a dietary adjunct dates back to the time of Hippocrates. The first publication relating to it was by Geoffroy, in 1730. During the next hundred years a number of French chemists gave the subject special study, but it was not until in 1847, when Baron Justus von Liebig published his classical studies on meat, that meat extracts became widely known. Following the suggestions of Liebig's work, Max von Pettenkofer devised a method for preparing the extract, which was admitted into the Bavarian Pharmacopœia in 1856. This method was used by a company acting under Liebig's authorization in South America, where a plentiful and cheap supply of cattle was obtainable. The name "Liebig's Extract," first applied to this preparation, is now given to many extracts differing greatly from the original preparation in composition, properties and method of manufacture. The English courts have decided that the name "Liebig's Extract" is public property, so that its appearance on a label by no means establishes that the product is manufactured by the Liebig's Extract of Meat Co., or that the Liebig process has been used.

By Liebig's original method finely chopped meat was treated with eight times its weight of cold water, the insoluble matter strained off, the liquid sufficiently heated to coagulate the dissolved albumin, filtered, and evaporated to a syrupy consistency. By this method proteins, gelatins and gelatinoids were excluded from the extract. Later, however, Liebig modified the process by using water at 180° F., which may admit into the extract considerable quantities of gelatinoids and soluble non-coagulable protein. Liebig stated that thirty-four pounds of meat are necessary to produce one pound of extract. It is obvious, therefore, that the extract can contain only a small part of the real nutriment of the meat. It contains practically no albumin or fat and very little gelatin, but consists chiefly of the salts and extractives of the meat, and, according to Liebig's statement, should contain from 16 to 21 percent of water, from 18 to 22 percent of mineral matter, and from 56 to 60 percent of extractives.

A few extracts now on the market show by their composition that the original Liebig process has been quite closely followed in their manufacture, but the larger number resemble Liebig's Extract in little but name. Gelatin, blood albumin and meat fibrin are added in certain cases, and in

[1]This is the first half of the paper on "Meat Extracts," and it will be completed in the August issue. The fifth of the series of articles on Foods will be on the subject "Package Foods" and will be published in September.

some the albumin has been partially peptonized. The great majority of extracts contain large quantities of common salt, due to the fact that they are not true extracts, but are made, in part at least, from evaporated pickling brines.

PHYSIOLOGICAL EFFECT OF MEAT EXTRACTS

The nutritive value of meat, as distinguished from its stimulating and appetizing effects, lies chiefly in the proteins it contains, which are not and cannot be "extracted" and presented in a concentrated form in an extract. To add proteins to the extract, as is done by certain manufacturers, only reduces the amount of the extractives to which meat extract owes its real and peculiar value, and substitutes relatively small quantities of nutriment at an unreasonable price.

Proteoses and peptones, because of their ready assimilation, doubtless possess nutrient value, but the amounts of these compounds present in meat extracts have been greatly exaggerated. In fact, no true peptones were found in any of the paste preparations examined by the writer, this judgment being based on the failure to secure the biuret reaction in the filtrates from the zinc sulphate precipitation of the proteoses. That part of the nitrogen attributed to peptones in the writer's tables is probably due to amid-like anhydrids of the amino acids, Fischer's "polypeptids." Furthermore, much of the nitrogenous matter precipitated by zinc sulphate and generally credited to forms of proteoses, is doubtless due to gelatin and gelatinoids, which have only a subordinate food value.

The true value of a meat extract depends almost entirely upon the salts and extractives it contains, and upon its flavor. The characteristic salts of true meat extract are phosphates of potassium, although potassium chloride is also present in considerable amount. But it is the extractives that give meat extracts their chief value. These may be classed as nitrogenous and non-nitrogenous. Most of the former are basic in character, some are amids, and all are classed under the somewhat loose term "meat bases." The most important of these physiologically are creatin, its anhydrid creatinin and the xanthin or purin bases. In recent years investigators have isolated a number of other bases, but they are present in extremely small amounts. The meat bases are products of the breaking down of proteins in the vital processes of the body, are excreted for the most part unchanged, and have little or no use as builders of tissue; neither have they any value as producers of heat or energy. They are, therefore, in no sense foods.

Probably much larger amounts of meat extracts are used today by hotels and restaurants for flavoring soups and other dishes than are used by invalids. Many physiologists attribute to the meat extractives certain stimulating qualities, but the experiments supporting this view are by no means conclusive. There seems to be, however, quite certain evidence that they furnish relief to fatigued muscle and that they are powerful excitants of gastric secretion. As Hutchinson well says: "They are thus eminently calculated to rouse appetite and aid digestion of any food with which they may be taken. This indeed is their true function, both in health and disease. They are flavoring agents, and their proper place is in the kitchen, not by the bedside."

The non-nitrogenous extractive matters, in addition to the salts already referred to, consist chiefly of lactic acid, lactates and glycogen. Little is known as to the actual amounts of these ingredients present. Glycerol, glucose and milk sugar are occasionally found in the extracts and must be considered as adulterants; preservatives have also sometimes been employed, especially in fluid extracts, but are seldom found at the present time, except potassium nitrate (saltpeter), frequently a constituent of the pickling brines used in the manufacture of certain brands of extracts.

HOW TO VALUE AN EXTRACT

The comparative value of a meat extract is shown by determinations of water, total ash and its chief constituents, total nitrogen, and the meat bases. These data show the concentration of the extract, the amount and nature of the ash, and the proportion of true meat extractives present. There are preparations on the market, sold as meat extracts, which are prepared wholly from yeast; on the other hand, certain brands of yeast or vegetable extracts are honestly sold under their true names. These resemble meat extracts in taste and appearance, but show marked chemical differences. The important extractives, creatinin and creatin, are absent, while the purin bases are comparatively abundant. The amount of creatinin and creatin found, therefore, is a valuable index as to the source of an extract.

STANDARDS OF COMPOSITION

Certain standards of composition exist, which have been adopted by the Federal government and by many of the states. These are given below so that the reader may judge as to the standard or non-standard quality of the extracts listed in the tables.

"Meat extract is the product obtained by extracting fresh meat with boiling water and concentrating the liquid portion by evaporation after the removal of fat, and contains not less than 75 percent of total solids, of which not over 27 percent is ash, and not over 12 percent is

sodium chlorid (calculated from the total chlorin present), not over 0.6 percent is fat, and not less than 8 percent is nitrogen. The nitrogenous compounds contain not less than 40 percent of meat bases, and not less than 10 percent of creatin and creatinin."

"Fluid meat extract is identical with meat extract, except that it is concentrated to a lower degree and contains not more than 75 and not less than 50 percent of total solids."

In the judgment of the writer the best standard for a true meat extract is found in Liebig's extract itself. This extract has always been one of the best preparations on the market, and repeated analyses show that it is carefully prepared and with only trifling variations in composition from year to year. Moreover, it contains no foreign constituents, like common salt, glycerol, milk sugar, spices, etc.

EXPLANATION OF TABLES

An extended review of the literature of meat extracts shows that most diverse analytical methods have been used by chemists and that in many cases a satisfactory comparison of analyses is impossible. In the tables which follow only analyses made by essentially the same methods have been included. These comprise 42 made by the writer, 7 by Bigelow and Cook of the U. S. Department of Agriculture, 11 by McGill of the Canadian Inland Revenue Department, and one made in the laboratory of the American Medical Association. These 61 analyses include 14 solid (paste) extracts, 17 fluid extracts, 8 meat juices or essences, 9 cubes or capsules, 2 meat powders, and 11 miscellaneous proprietary meat preparations.

The tables are necessarily somewhat complicated, as the analysis of a meat extract is by no means a simple matter, and all the data given are necessary for a correct interpretation of the genuineness of the product. The significance of the several determinations in brief is as follows:

Water. This indicates the concentration of the extract. The maximum percentage allowed by the standard in a paste extract is 25, and in a fluid extract 50 percent. According to Liebig not over 21 percent should be found in an honest, properly made extract.

Organic matter. This includes the nitrogenous constituents, meat acids and any organic adulterants, such as glycerol, milk sugar, glucose, spices, etc., which may be present. Naturally, it varies with the amount of water and mineral matter. Liebig set 56 percent as the maximum permissible amount in a paste extract.

Ash. This includes the true ash of the meat, as well as the added sodium chlorid, which is so commonly found. According to the standard for paste extracts the total ash should not exceed 27 percent; according to Liebig, 22 percent.

Sodium chlorid. The standard permits 12 percent in a paste extract, an unnecessarily high figure, and one directly encouraging fraud and the use of inferior stock. The natural chlorids, calculated as sodium chlorid, probably do not exceed 5 percent in any of the extracts examined.

Phosphoric acid and potash. Phosphates of potash are the characteristic salts of meat. About 20 percent of the ash should be in the form of phosphoric acid and about 30 percent as potash.

Acidity. The acidity of flesh is due to the acid phosphates, organic acids and proteins present. As most of the meat proteins are insoluble in water, the acidity of the extracts is due chiefly to the acid phosphates and organic acids. Potassium dihydrogen and potassium monohydrogen phosphates are the chief phosphates present, and lactic acid the chief organic acid. Litmus was used arbitrarily as the indicator in determining acidity, and the values recorded are relative rather than absolute. A low acidity indicates a correspondingly small amount of meat constituents in the preparation.

Total nitrogen. In a paste extract this should not be less than 8 percent. This determination by itself, however, gives little useful information, as it is the form in which the nitrogen exists that determines the value of the extract.

Insoluble and coagulable nitrogen. The manufacturing process practically excludes coagulable nitrogen from a genuine extract. Likewise, as all of the nitrogen in the extract is supposed to have been soluble before concentration, more than traces of insoluble nitrogen would indicate the addition of extraneous matter such as meat fiber.

Proteoses and peptones. The amount of these two forms of nitrogen indicates in a measure the nutritive value of the extract. By the analytical methods used the percentages recorded as proteoses include both proteoses and gelatinoids, as well as gelatin if present. The original process of Liebig naturally excluded gelatin, but since the employment of hot, even boiling, water, it is extremely probable that considerable amounts of gelatin are present in most of the brands. These proteose values, therefore, must not be given too much weight. Likewise with the peptones; as already stated, the writer failed to find true peptones in any of the brands of paste extracts he examined. The values accredited to peptones in the tables represent the nitrogen precipitated by tannin-salt, less the proteoses. This the writer believes to be not natural peptones but compounds of the nature of polypeptids.

Meat bases. This percentage indicates in a large degree the amount of true meat extractives present. According to the standard at least 40

Table I. Analyses of Solid (Paste) Meat Extracts

Brand.	Manufacturer.	Water.	Organic Matter.	Ash.	Chlorin as Sodium Chlorid.	Phosphoric Acid.	Potash.	Acidity = cc N_{10} NaOH per gram.	Nitrogen as: Total.	Insoluble and Coagulable.	Proteoses.	Peptones.	Total Meat Bases.	Creatinin and Creatin.	Xanthin or Purin Bases.	Other Meat Bases.	Ammonia.	Fat.
[1]A. D. S.	American Druggists' Syndicate	18.27	52.45	29.28	15.72	3.11	6.41	4.20	*7.26	0.08	2.20	1.92	2.51	0.70	0.59	1.22	0.55	0.07
[1]Armour's	Armour & Co.	19.96	58.27	21.77	6.62	5.27	8.30	5.40	8.07	0.29	2.10	2.17	3.21	0.85	0.62	1.74	0.30	0.08
[3]Ramonie (ave. of 4)	Australian Meat Co.	17.48	59.54	22.98	4.79	....	....	....	9.01	0.33	3.83		4.85	3.01	....	....	....	0.75
[1]Rex	Cudahy Packing Co.	16.08	55.96	27.96	11.50	3.47	8.02	4.80	8.19	0.13	1.80	2.17	3.66	1.26	0.53	1.87	0.43	0.08
[3]Davies	Wm. Davies Co.	20.80	64.08	15.12	8.32	....	....	....	9.18	0.20	4.08		4.90	2.10	....	....	....	0.25
[2]Coin Special	G. H. Hammond Co.	12.39	55.93	31.68	13.25	3.19	....	7.16	6.86	0.06	0.86	1.48	4.21	1.24	0.52	2.45	0.25	0.43
[1]Michigan	F. F. Ingram & Co.	18.21	53.18	28.61	15.89	2.43	5.24	3.80	†7.36	0.24	1.96	2.65	1.31	0.53	0.48	0.30	0.47	0.12
[1]Liebig's	Liebig's Extract of Meat Co.	20.49	61.94	17.57	3.17	5.01	7.59	8.40	9.41	0.09	2.36	2.15	4.44	2.16	0.76	1.52	0.37	0.17
[3]Portrait	Liebig's Extract of Meat Co.	19.55	52.15	28.30	12.20	....	....	....	8.96	0.25	3.60		5.11	3.02	....	....	....	0.95
[1]Malto-Meat	Malto-Meat Extract Co.	14.79	48.93	36.28	25.81	5.21	5.35	5.20	5.20	0.09	0.44	2.10	2.18	0.10	0.83	1.25	0.39	0.09
[1]Durham	Melbourne Trading Co.	36.54	36.18	27.28	22.28	1.43	2.29	1.90	*5.45	0.26	3.42	0.70	0.86	0.39	0.16	0.31	0.21	0.21
[1]Mosquera Beef Jelly	Mosquera-Julia Food Co.	24.88	50.77	24.35	13.61	3.59	5.31	3.20	7.72	0.24	2.30	2.49	2.29	0.62	0.38	1.29	0.40	0.04
[1]Southwick	Southwick Mfg. Co.	30.37	41.38	28.25	22.47	1.15	3.20	4.80	*5.54	0.34	3.16	0.78	1.04	0.21	0.38	0.45	0.22	0.44
[1]Swift's	Swift & Co.	22.81	51.75	25.44	12.71	3.95	7.23	7.40	7.14	0.10	1.72	1.44	3.14	1.33	0.64	1.17	0.74	0.08

[1]Street, Rept. Conn. Expt. Station, 1908, 618.
[2]Bigelow & Cook, U. S. Dept. Agr., Bur. of Chem., Bull. 114.
[3]McGill, Canada Int. Rev. Dept., Bull. 267.
*Trace of nitrates present.
†0.73% of nitrate nitrogen present.

Table II. Analyses of Fluid Meat Extracts

Brand.	Manufacturer.	Water.	Organic Matter.	Ash.	Chlorin as Sodium Chlorid.	Phosphoric Acid.	Potash.	Acidity = cc N_{10} NaOH per gram.	Nitrogen as: Total.	Insoluble and Coagulable.	Proteoses.	Peptones.	Total Meat Bases.	Creatinin and Creatin.	Xanthin or Purin Bases.	Other Meat Bases.	Ammonia.	Fat.
[3]Beefene (ave. of 2)	American Fluid Beef Co.	45.57	40.07	14.36	8.25	....	....	....	5.59	1.56	2.71		1.32	0.61	....	....	....	1.17
[1]Asparox	Armour & Co.	68.37	17.12	14.51	10.07	0.96	2.27	1.64	1.78	0.11	0.38	0.26	0.92	0.29	0.14	0.49	0.11	0.02
[1]Armour's Concentrated	Armour & Co.	42.03	36.41	21.56	10.43	2.72	5.46	4.24	4.01	0.10	0.45	1.05	1.99	0.91	0.36	0.72	0.42	0.00
[1]Vigoral	Armour & Co.	43.15	41.14	15.71	5.84	2.85	5.34	3.84	4.09	0.33	0.55	0.98	1.97	0.61	0.31	1.05	0.26	0.19
[1]Bovril	Bovril Limited	43.12	41.07	15.81	7.89	2.48	3.55	3.10	5.36	1.03	1.33	1.00	1.55	0.79	0.35	0.41	0.45	0.62
[2]Johnston's	Bovril Limited	47.22	42.98	9.80	4.37	0.59	....	5.40	6.57	0.21	1.72	2.15	1.24	0.20	0.18	0.86	0.25	0.48
[3]Vimbos (ave. of 8)	Bovril Limited	32.87	49.81	17.32	7.98	....	....	....	7.36	1.29	4.48		1.59	0.89	....	....	....	0.60
[1]Cibils	Cibils Co.	64.21	19.95	15.84	12.56	1.38	1.98	2.00	2.79	0.14	0.60	0.80	1.07	0.46	0.17	0.44	0.18	0.00
[3]Red Cross	Colonial Fluid Beef Co.	37.70	44.11	18.19	7.62	....	....	....	7.28	2.13	3.89		1.26	0.14	....	....	....	1.15
[1]Rex	Cudahy Packing Co.	51.53	33.29	15.18	4.93	2.87	4.81	3.82	4.48	0.16	0.66	1.17	2.30	0.89	0.34	1.07	0.19	0.05
[3]Oxo (ave. of 7)	Liebig Oxo Co.	34.40	45.98	19.62	9.50	....	....	....	6.00	0.87	2.71		2.42	0.94	....	....	....	1.17
[3]Nutri-Ox	Northland Mfg. Co.	45.35	38.35	16.30	9.69	....	....	....	4.34	0.55	1.30		2.49	0.72	....	....	....	2.35
[1]Morris' Superior	Nelson Morris & Co.	51.80	32.39	15.81	9.83	1.78	3.36	2.20	4.04	0.22	0.81	1.11	1.48	0.00	0.15	1.33	0.42	0.13
[1]Mosquera Fluid Beef Jelly	Mosquera-Julia Food Co.	64.99	23.73	11.28	8.22	0.99	1.73	1.80	2.90	0.06	0.31	1.10	1.30	0.26	0.12	0.92	0.13	0.10
[1]Murray's	.....	54.07	29.84	16.09	12.67	1.07	1.97	1.52	4.22	0.02	1.59	1.61	0.80	0.30	0.13	0.37	0.20	0.08
[1]Sinuox	Sinuox Co.	57.33	26.76	15.91	11.72	1.36	2.37	3.28	2.28	0.00	0.57	0.26	0.87	0.33	0.18	0.36	0.58	0.00
[1]Sinuox for Invalids	Sinuox Co.	51.57	29.51	18.92	12.46	2.18	3.48	3.56	2.70	0.05	0.31	0.64	1.42	0.64	0.26	0.52	0.28	0.16

[1]Street, Rept. Conn. Expt. Station, 1908, 642.
[2]Bigelow & Cook, U. S. Dept. Agr., Bur. of Chem., Bull. 114.
[3]McGill, Canada Int. Rev. Dept., Bull. 267.

percent of the nitrogen should be in this form. The standard also requires that the creatinin and creatin shall make up at least 10 percent of the total nitrogen. These two bases are characteristic of meat extracts, and their absence indicates the use of yeast or vegetable extract.

Ammonia. This value should be low in an extract of good quality.

Fat. This also should be low, the standard not permitting over 0.6 percent in a paste extract. Fat is a detrimental ingredient in an extract, and in any considerable amount indicates an imperfect method of manufacture, and seriously affects its keeping qualities. It will be noted that the writer's fat percentages are generally considerably lower than those of the other authorities quoted. This is possibly due to the use of different solvents, the writer using petroleum ether, which he believes preferable to sulphuric ether in a material of the nature of meat extract.

WHAT THE TABLES SHOW—PASTE EXTRACTS

Table I gives analyses of 14 brands of paste extracts. The following maxima and minima percentages of certain important ingredients show the wide range in composition:

	Maxima.	Minima.
Water	36.54	12.39
Ash	36.28	15.12
Sodium chloride	25.81	3.17
Total nitrogen	9.41	5.20
Meat base nitrogen	5.11	0.86
Creatinin and creatin nitrogen	3.02	0.10

A study of the table shows that the Armour, Ramonie, Rex, Davies, Liebig and Portrait brands (although the last named is a little high in ash) satisfy the U. S. standard. Certain samples carry entirely too much ash, while others are decidedly deficient in total nitrogen, and in meat bases. Three brands contain nitrate nitrogen (indicating the use of saltpeter-containing brine), in one case as much as 0.73 percent. The Michigan, Durham, and Southwick brands are markedly deficient in meat bases, and especially in creatinin and creatin. Malto-Meat is a vegetable extract, in spite of its misleading name, and contains only 0.10 percent of these bases. The sample of Swift's extract contains entirely too much ammonia nitrogen for a high-grade extract. When the percentages of sodium chlorid found in high-grade standard extracts, such as Armour's, Liebig's and Ramonie, viz., from 2.88 to 5.47 percent, are compared with the 26, 22 and 22 percent of the Malto-Meat, Durham and Southwick extracts, the distinction between a high-grade and a low-grade extract is very apparent. Furthermore, these last named brands, except Malto-Meat, which is not a meat extract, contain saltpeter, again indicating their inferior source, and explaining the presence of such inordinate amounts of common salt.

FLUID EXTRACTS

Table II gives analyses of 17 brands of the fluid preparations. Any of these which contain more than 50 percent of water naturally fail to satisfy the U. S. standard; this is true in just half of the analyses given in the table, 69 percent being the maximum shown. Asparox, Cibils and Mosquera Fluid Beef Jelly all contain excessive moisture. In most of the extracts the amount of ash is large in relation to the concentration. Vigoral, Bovril and Rex contain but little added salt, while Asparox, Cibils, Murray's and the two Sinuox extracts contain a great deal. The total nitrogen ranges from 1.78 to 7.36 percent. It will be noted that the percentages of insoluble and coagulable nitrogen as a rule are much higher in the fluid than in the paste extracts; Beefene, Bovril, Johnston's, Vimbos, Red Cross and Oxo are notable in this respect. This is due mainly to added meat fiber and gives the product a distinct food value, although a large quantity of any of these extracts would be needed to supply the same amount of nutriment as a pound of good, lean meat. True peptones were found in certain of the fluid extracts, likewise in certain brands the proteoses were high. The high insoluble nitrogen coupled with the relatively large amounts of proteoses and peptones found in Beefene, Bovril, Johnston's, Vimbos, Red Cross, Oxo and Murray's extracts justify these brands in claiming a distinct, though very moderate, food value.

In the fluid extracts the meat base nitrogen should of course make up at least 40 percent of the total nitrogen just as in paste extracts. The table shows, however, that the brands which contain the largest amounts of insoluble proteose and peptone nitrogen, are, on the other hand, excepting Oxo, decidedly deficient in meat base nitrogen, of course a natural consequence. In fact, Johnston's, Red Cross and Morris extracts are very deficient in creatinin and creatin, the latter containing none at all. Certain brands of fluid extract formerly contained salicylic acid, but the writer believes the practice has been discontinued in recent years.

The claims made for these products, such as great "concentration" and as "containing all that is nourishing in prime, fresh beef," must be taken with more than the proverbial grain of salt which they contain.

(TO BE CONTINUED.)

Dressings of wounds infected by virulent anærobic organisms have been made the subject of an exhaustive study by Fleet Surgeon P. W. Bassett-Smith, of the British Navy, in conjunction with Sir Watson Cheyne at the Royal Naval College at Greenwich, England. Salicylic acid was finally fixed on as the most effective germicide and disinfectant for conditions now prevailing on the battlefields of Europe.

"OFFICER OF THE DAY" SYSTEM OF HOSPITAL MANAGEMENT

Responsibility Given to Under Officers Relieves Busy Superintendents, and Brings Greater Interest and Attention on the Part of Participants—Effective Trial Has Proved Value of System

By JOHN R. HICKS, M. D., Chief Medical Officer, Port of New York

IN my excursions through hospital literature I have often found such sentences as these: "The ward is a small hospital which would require only certain administrative additions to make it complete," "A large hospital might be formed by the addition of similar units," "It is permissible to group five ward units under certain conditions on the top of one another."

These sentences have not given us to understand that there is any necessity for correlation and interdependence among the various administrative departments of the hospital, nor do they lay any particular stress upon the various duties of a superintendent, which, among others, involve intimate administrative cooperation in all the departments, whether these departments be medical, surgical, nursing, supplies, pathological, admissions, out-patient or general administrative. To my mind it is most essential to have a uniform standard of administration and above all to discard the "hospital unit," if it means separation and lack of dependence of one department upon another.

One must realize the importance of an administrative unit in its broadest sense and not in the sense of the commonly accepted definition of a "hospital unit," when one becomes familiar with the work of a quarantine character; for it is a hazardous employment. In the experience of this particular service, death in the performance of duty has occurred in the medical branches of the organization, and death or disability of a responsible officer in an emergency might be of grave public consequence were there not another official of rank familiar with the duties of administration to take his place immediately.

The following system of administration was put into effect by order of the health officer for the hospital service of the port of New York over a year ago, so that the assistant medical officer might be able to take the chief medical officer's duties and responsibilities on the shortest notice: "The supervision of the buildings, including hospitals, detention quarters, and all administration functions devolve upon the chief medical officer and in his absence the assistant medical officer must be able to take his place." When one stops to consider that there may be as many as one thousand admissions in a day and that often they may be kept for a period of fourteen days, quick action and good returns are most essential. While this service is not what might be called a purely civil hospital service, I see no reason why the method of administration in operation here should not apply with equal benefit in civil hospital administration.

For want of a better name I may call the system the "officer of the day system," which is as follows:

There shall be an officer of the day, whose duty it shall be to exercise supervision and administration of all departments of the hospital service, to make all the calls for the sick or for emergencies both night and day; to answer all local official telephone calls for the medical officer; to inspect all the property, including buildings, storerooms, kitchens, grounds and boats; to report to the medical officer as often as necessary the conditions found by such inspection and to visit incoming boats arriving at the Island during his hours of duty; to keep careful records of all patients admitted during his period of duty and a minute of such other matters of importance as may come to his attention. His period of duty shall be twenty-four hours continuously from 8 a. m., on the day of his assignment to such duty. He shall be responsible to the chief medical officer and shall consult with him in emergencies; but this does not relieve the chief medical officer or superintendent of any responsibility for the proper administration and government of the hospital service.

I see no reason why the intern in the civil hospital should not be made "officer of the day" and have the duties of that office. By this method the responsibility either for right or wrong doing is most easily fixed.

After trial of this method for a year and a half, I can say that the assistant medical officers have taken decidedly more interest in this work as well as in their books, and I believe the system might be extended to a number of civilian hospitals, if not all, with the result of creating more general unity in hospital administration. In a very large hospital it might be necessary to have more than one "officer of the day" in which case the interns detailed as such will have a good opportunity to learn hospital administration, a thing which has heretofore been much neglected in their instruction.

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Rules of Technic in Hospitals

In this, which might happily be called the age of business accuracy, when forces at work in almost any field of activity attempt to correlate themselves with other forces to add strength and effectiveness to their combined efforts, the hospitals have not been idle; they too have been thinking in terms of coordinated effort.

But we have not, as yet, got very far—not nearly so far as we would have got if the composite hospital, for instance, were part of a great commercial machine, whose output in dollars depended, not alone on itself, but on a combination of activities of which it was only a cog.

Superintendents of hospitals, for instance, have created accounting systems by which their earnings and income from all sources can be totaled in accurate comparison with their expenditures. They have reduced their purchasing business to something very much like other commercial achievements; and even in some isolated cases they have made some progress in whipping their scientific departments into a semblance of coordination with their physical and financial operation.

The physicians and surgeons on hospital staffs have also made some progress; they not only want to perform good and effective service to the sick in the institution, but they are now inquiring about the results of this service back in the home of the patient—hence social service and visiting nursing.

There is one other very necessary step—one that has received too little attention from those best qualified to study the problem and get results; and about this Dr. Babcock tells us some personal experiences in another page of this number, and gives us some most serviceable information. This step concerns coordination of effort between the operating physician and surgeon and the hospital administration.

Dr. Babcock confines himself mostly to the story of a simplified surgical technic as practiced in his own hospital. But precisely these same methods are practicable in all the other departments of the institution—a fact which Dr. Babcock suggests.

Every hospital should have definite rules of technical procedure, one set fitted to each department. The best way to establish these rules so they will hold water, is to have the staff members in each service work out a set of rules of their own, these to be approved by the hospital administrator, as showing that they are workable from the administrative standpoint; and eventually they should receive the stamp of finality of the board of trustees—after which they are inviolable.

Where the hospital allows outside physicians and surgeons the courtesies of the institution for their private patients, these outside doctors should be expected to conform to the regular staff rules, wherever their service calls them.

Crime and Health

Some thirty years ago, a boy just out of medical school, and serving his internship in a big municipal hospital, was assigned to visit the "workhouse" of the city in the capacity of attending physician.

For three months those horseback rides along the country roads, with the wild roses climbing the old snake fences, as though they would seek the highest point whence to send out their fragrance, the larks and thrushes filling the countryside with melody, gave ample time for contemplation—ample time for dreams. Those months stand out in the mind and heart of that boy, after thirty years, with almost a hallowed memory.

The boy was awakened irreverently one morning when the superintendent of the hospital sent for him and handed him the following note:

Superintendent City Hospital.

Dear Doctor: Please send us another doctor in place of that crazy kid that's been on the job; and I advise you to look out for him; his mind ain't right. About a month ago he told me I was a worse criminal than any jail bird I had here; said I was a brute and threatened to report me.

He wanted me to start flower beds in the jail yard and let prisoners take care of them. He even wanted flower beds outside the walls and wanted prisoners to look after them. He's been talking about an honor-roll—as if these crooks had any honor. He said he was going to write to the mayor and ask him to make me send an honor squad of prisoners out to the insane asylum to help 'tend the farm there. He says a criminal is a crazy man and a crazy man is a sick man and needs a hospital instead of the solitary and the "bits" we give 'em here for disobeyin' the rules.

You better watch out for that kid; in the meantime send us a real doctor.

(Signed) THE WARDEN.

For the past two years Dr. Harris S. Cooley, Director of Welfare of the City of Cleveland, has had more than 400 petty offenders (the same class as the workhouse inmates and the chain gang of thirty years ago) living on the 2,000-acre Cooley farm, fifteen miles from Cleveland. These men and women are all honor inmates; they take teams and farm tools and go two or three miles from the buildings; they take their lunches with them and work well. The overseer is not armed and the men work just like other workmen who labor voluntarily for wages. It is rare that one runs away.

Now comes the Illinois State Penitentiary at Joliet. Henry M. Hyde, in the Chicago *Tribune* of June 2, gives a two-column account of the new honor system there. The following are some of the pertinent paragraphs of the article:

"Bei Gott!" he almost whispered. "The grass is just as green as it used to be!"

The man had been penned inside of a stone wall for twenty-eight straight years. The wall is so high that he had never caught a glimpse of what was going on outside.

Half of each twenty-four hours for twenty-eight years he had been locked up in a stone and iron cage.

He is illiterate as well as profane. He is also a murderer. He is serving a life sentence at Joliet penitentiary. One may as well face the facts before he lets go of his sympathy.

Yesterday the man went outside of the high stone wall for good, unless he is returned for his own fault. He became one of the 137 honor convicts who are working the state honor farm, which covers a great stretch of country three miles from the prison walls.

The honor convicts live and eat and sleep in a lot of farm houses, which used to be scattered all over the great tract of 2,200 acres which are now comprised in the one great honor farm. Under the direction of Warden E. M. Allen these houses have been moved on rollers over the country roads and brought together into two groups, the honor convicts doing most of the work.

There is not a gun, not an armed guard, on the whole place. Capt. J. C. Carver, who had army experience in the Philippines, is the official who represents the warden in direct charge of the honor farm. There is also a night watchman at each group of cottages who sees that everything is all right after the lights go out. That is all.

Last year when work on the honor farm began some sixty convicts were employed and housed there. This season for some months there have been 136 living in the farmhouses. Under the direction of farm superintendent, B. H. Faltz, they have put 2,100 acres into crops. They have repaired and rebuilt many of the barns and outbuildings. Yesterday morning a dozen men with riding cultivators were sent out a mile or two from the cottages to cultivate the 650 acres in corn, which already shows a splendid stand.

At noon they came trooping in from all over the great farm in answer to the farm bell, which rang for dinner. There was no roll call, no formal attempt to see that all the men were there. They sat down about long tables, more than ninety in the dining room at one group of cottages, and about forty in the other.

Among them were thirty-six men sent down to the penitentiary for life for murder. Why don't they run away?

Six men in the two years that the Honor Farm has been running have tried it. Five of them have been caught, brought back and locked up in the stone and iron cages behind the high stone wall for good. There has not been one attempt to escape for more than three months. Warden Allen plans to put up some temporary sleeping quarters on the honor farm and to move 360 more honor convicts over there from the penitentiary. That will make a total population of 500 convicts, practically without guards. First of all, under expert direction these men will set to work to build a drainage system which will cover the whole farm.

There is really nothing to add.

The Layman's Influence on Hospital Work

As bedside diagnosis and empiricism in treatment give way to scientific precision in the care of the sick, we enter upon an era of administrative medicine. The ear, the eye, and the touch of the clinician are no longer his full armamentarium; there are laid out for his use long lists of apparatus, many methods and an infinity of scientific auxiliaries; if he is to keep up with the killing pace which we know as modern medicine, the clinician must now act as the general of an army, with every sick patient a campaign. He must give his orders to subordinates, the pathologist, the roentgenologist, the physical therapist, the dietitian, the nurse; the intern is his aid-de-camp to carry orders and see that they are obeyed.

Meanwhile the gathering together of all this complex organization, the keeping of it in running order, the creation or concentration of the funds necessary to bring it about—all these are as insistent in their demands for special talents and special training as the requirements in the office of physician.

The technic of administration is being well looked after by men and women who, on their part, are equipping themselves in grueling processes of training, and on the whole their end of the campaign is being fairly well handled.

But necessarily there must be some power above the clinician and above the administrator, a power that will cause these two factors to work in harmony and in such cooperation that the

smallest possible energy will bring the largest possible returns. The governing body of a state is such a factor in the social order; the board of directors of a corporation, in business. As these governing bodies are made up of individuals expert in the business they are set to govern, or the reverse, the results will be good or poor.

Why do not these patent facts follow into the organic law of hospitals? Will anyone contend that up to this time the hospitals have had the benefit of experts in their boards of trustees?

Name over the half dozen hospitals in this country that stand highest in the qualities that make for service in keeping with the spirit of the age; now make the most careful inquiry to ascertain who is responsible for the high estate to which these institutions have come. In every case it may safely be predicted that while one or more medical men or the superintendent may be named as the guiding genius of the institution, over and behind him or them will be found a board of trustees or one or more of its individual members, who give the real inspiration, the real support, the real impetus to the activities of the institution.

In a few isolated cases we will find the helm in the hand of some man who, having amassed a competence for himself and family, by keen business methods, has retired from the scramble for more gold, and has devoted to the institution the same talents that gave him individual success. Such a man does not give orders to the cook or meddle in the details of housekeeping; but his business training will have developed in him the power to bring team work into the business, so that everybody does the best he can for the common purpose.

Such a man will have as firm a hold on the confidence of the community at large as he will have in the institution itself, and will be the most potent factor in bringing in money and material support of all kinds when they are needed.

It is the bounden duty of every institution trustee to look in upon himself occasionally, with a view to an analysis of his status on the board; let not these men take to their souls the flattering unction that their importance in the social, commercial, religious or financial community justifies their holding their office. "Faith without works availeth little," says the Good Book, and "by their works ye shall know them," meaning that one who *is* something is worthless to a cause unless he *does* something.

One has occasion to wonder sometimes why more splendid business men, who find a further pursuit of mere money a distasteful routine, and retire, do not engage in the elevating and useful pastime of lending their talents and their time to the development and broader usefulness of some good institution near their hand! Can one conjure up in the imagination a finer or more satisfying end of a busy and successful career, than to spend it in doing good for someone else?

Silver and gold weigh light as air in the scales of immortality, but good deeds are writ in the book of life, and the doer, taking his leave, may have the happiness to know that the world is better for his having passed through it.

New Things in the Hospital

It has often been deplored by hospital administrators that they cannot get the hearty cooperation of the training school in the institution of new things and new ways. It has been said that training school heads resent the introduction of new technic and of new apparatus; and it is very true that this is too often the case.

But there is another side to this; too often the things or methods suggested are not very well thought out by those who wish them installed, and very, very often medical men and even superintendents fail to realize what it means to set up a new technic in the hospital.

Training school heads have some very green timber to work with; the average pupil nurse does as she is told to do—if she doesn't forget what she has been told, and has horse sense enough; she works like the printer's apprentice, "follows copy," no matter how ridiculous the result may be. These girls haven't arrived yet at a point where they can do things in their own way and on their own initiative. It is hard enough to teach them the technical processes of the hospital at best.

Now if any staff member can come along and upset that rigid technic, by substituting something new, or if the superintendent, a progressive one perhaps, insists on trying out new things, just to see if they will work, it will not take very long until there will be no settled way of doing things at all, and the training of pupils will be a farce.

Responsible people in the hospital should be very chary of asking a departure from the established order in the training school.

Plans have been drawn by Architect J. B. Benedict, of Denver, for a hospital to be erected in that city at a cost of $300,000. Half of the required fund has been donated by a Boston philanthropist, whose name has not been made public, and the other half has been subscribed by Denver physicians. The object of the institution will be to afford hospital care at a low rate to worthy poor who will not accept public charity and are not able to pay the high rates charged by private hospitals. The newspapers of the city, the ministerial alliance and the charity organizations will be asked to determine just what persons are entitled to be received into the new hospital.

HOSPITAL MEETINGS FOR JUNE

American Hospital Association—American Medical Association—Sisters' Hospital Association and Nursing Associations Hold Annual Conventions

The San Francisco and Milwaukee Meetings

San Francisco is to be almost given over to medical, hospital and nursing conventions during the latter part of June, too late for THE MODERN HOSPITAL to do more than merely mention the fact and publish a very few of the papers which will have been read before this issue comes out. It is the intention to distribute copies of this number at each convention just prior to its close. One of the purposes of this distribution is that there may be suggestions, either in its text or advertising pages, that will be of interest to those in attendance before they return home.

While San Francisco is busy with its conventions another event, one of the most important to hospitals everywhere, is occurring in Milwaukee, in the First Annual Convention of the Sisters' Hospital Association of the Northwest.

Next month we shall try to do justice to these several great bodies by giving important information concerning the happenings at the conventions, including discussion, news notes and new officers; and some of the most interesting papers will also be published.

AMERICAN HOSPITAL ASSOCIATION

Papers Read at the San Francisco Convention, June 22-25

Little Things That Are Big Things in Hospital Management[1]

BY ROBERT J. WILSON, M. D.,
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If the big things of hospital management are to be measured by the standard of money then there is no justification for the title of this paper. I think, however, that most hospital superintendents will agree with me that the big things in hospital management are those that contribute the greatest amount to the direct good of the patient, and that, through contributory channels, indirectly add to his relief and comfort. In these days of efficiency and economy money standards are apt to be used too much in appraising the actual value of things. I would not for a moment decry the necessity of keeping at the lowest possible cost everything that has to do with a hospital, but I am convinced that a hospital which is costing three dollars per day for the care of a patient may be giving less to him than one that is costing one dollar per day.

Most physicians and most medical superintendents, like all other directors of enterprises, are apt to argue from cause to effect, and in considering a proposition of any kind they premise that if such and such a thing happened in one way, and such and such a thing happens in another way, the result will be a certain effect—that is, if it were a matter of hospital management; if a certain amount of money can be obtained for the pay of employees and a certain amount for the purchase of the necessary medical and surgical supplies and equipment, a patient can be taken into the hospital and given adequate scientific treatment for that amount of money. For the consideration of this paper I propose to reverse the order of things and begin with a single patient and say that he demands for his treatment adequate medical and surgical attention, and that in the course of human events, if all goes well, he will be discharged from the hospital cured, and that some of the big little things that contributed to his cure will not have cost the institution one cent of money; but these things, having been properly weighed by the patient and visitors to the institution, will add to its reputation a weight of good report that could not be purchased for any money.

Now, what are some of the little things occurring in the wards which may add materially to the comfort of the patient and the reputation of the hospital? In the first place courtesy on the part of the employees; this costs nothing; it could be enforced in any hospital; next to it, and of far greater importance, which the hospital authorities could not force the employees to give, is sympathy. Courtesy can be purchased, sympathy cannot; sympathy grips the heart of the other fellow, courtesy does not. One may be courteous and cold and repellant, but sympathy is like the sunshine; it warms and makes happy and attracts, it dispels sadness, it softens the hard heart, it shares sorrows, it lightens burdens; it is the finest quality that any doctor or nurse or attendant who is in contact with the sick can have. The sympathetic nurse feels the pain herself, when she pulls the patient's hair while combing it. It's the gentle touch that makes the morning toilet so satisfying to the dependent sick, and these apparently trivial things might be multiplied indefinitely. We all know what they are; do we all see to it that these little details, which mean so much to the patient and so little in money to us, are carried out? The best hospital employees are not always the brightest and most highly educated. The mediocre nurse or doctor who can instil in the patients a confidence brought about by that indescribable chord of human sympathy is the greatest asset the hospital can have. Of course the highly educated one, who has not had educated out of him or herself, through the modern methods of efficiency and economy, that human sympathy which a great many start with, and few end with, would be the employee *par excellence*.

How can employees show this sympathy of which I speak? A patient is admitted to a hospital, coming into such environment for the first time in his or her life, surrounded by strange officers, strange ways of doing things, strange rules, of most of which they are ignorant until they hear in a peremptory tone, do this, or don't do that, from the people immediately directing their case; and at this time they are in as forlorn a condition as it is possible for anyone to be. The nurse and doctor in a ward where such a patient is confined are perhaps overworked, full of their own affairs for the day, and totally oblivious of the fact that there is a new, lonesome, sick, homesick patient in their ward. A smile from a nurse, a kindly inquiry in a kind tone of voice from the doctor, an expression by one or the other to the effect that a hospital is not a half bad place, expressed with the hope that their stay will be as pleasant as can be under the circumstances; a little interest shown as to the condition of the patient without becoming presumptive, or personal, or patronizing, will do a great deal towards their comfort and good feeling. If this kind of conduct on the part of the attend-

[1]Read at the conference of the American Hospital Association, San Francisco, June 25, 1915.

ants is followed up each day, if the almost brutal indifference that is common to many wards is abolished, you will see a great change in hospital management. There are little things that make great impressions upon patients, and the average hospital employee, doctor or nurse, seems unable to appreciate them. Questions should be kindly answered, a request for so small a thing as a drink of water should be immediately granted. The care to be used by doctor and nurse in protecting people against the horror of seeing the dying, protecting them against hearing callous remarks relative to the passing of the patient, the unseemly habit of pointing out patients in the ward and saying, this one or that one needs such and such a thing; giving directions to, or talking to nurses about their condition favorably or unfavorably without regard to their feelings, all are to be severely criticized.

When a patient enters the hospital he is divested of everything material that he has. How is this accomplished? Are his clothes and valuables torn off of him by rude and ignorant attendants, or is he told in an intelligent way why he is deprived of them? Is he given a receipt for them? If there is valuable property, is the hospital and its employees protected by having two persons as witnesses present when he gives up his valuables? Does the hospital provide a proper place to store his clothing? Is it kept on proper hangers and is his underclothing laundered before he is discharged, or does the attendant bundle up all his effects, hat, shoes, clothing, in a jumbled mass and tie it up in a bundle to be given to him on his discharge in a dented, wrinkled, and generally unfit condition? Does anyone take any interest in his clothes? They should! It costs little and means much both to the patient and the hospital. In our hospitals we are about to adopt the system of sending a nurse with the doctor on each ambulance, who will carry with her an outfit of hospital clothing, and who will remove the patient's clothing and jewelry in the home so that on admission to the hospital the question of clothing and valuables will not have to be considered. How often patients are neglected in the matter of the body hygiene! The rules of all hospitals say that the patient shall be supplied with an individual towel, an individual soap dish, an individual tooth brush; and how frequently these things, together with a wash basin, are placed before patients who are utterly unable to help themselves!

The doctor's rounds in the hospitals should be attended to with a strict punctiliousness, no matter how few the patients. Adherence to a rigid system maintains the proper morale in the service. The house staff should accompany the visiting physician, and no matter how much they may disagree with his opinions, or how little they may esteem his ability, they should be forced to show him the respect due his office. It is not the physician that they are serving, but the hospital and its patient, and there should be no deviation from the strict line of duty, irrespective of the personal and medical qualifications of the visiting physician.

House physicians and interns should work under definite prescribed rules, and before entering the service these should be explained to them by the executive officer and they should be requested to ask any information that they might desire at the time of the first reading of the regulations. It should be impressed upon ambulance doctors and admitting physicians that their duties are of a twofold character: first, as medical officers they receive the patients and assign them to the proper wards; second, as administrative officers they come in contact with the relatives and friends of the patients, and from their attitude these people draw their conclusions as to the character of the institution and the kind of treatment that is being accorded to the patients. This is a very important item for the reputation of the hospital, and for the peace of mind of the relatives and friends.

As far as possible the medical business of the hospital, aside from emergency cases and nursing duties, should end at a regular hour, and before the patients have retired to bed. Doctors should not be allowed on the wards after eight o'clock in the evening, unless sent for by a nurse for special cases.

When nurses are employed they should be informed fully of the regulations of the hospital before going to work. A good scheme is to have them read and sign the regulations, which should then be filed in the executive office. After this the nurses should be sent to the superintendent for a talk on hospital policy; such a talk should include the matter of their attitude toward patients; it should be explained to them that patients never voluntarily enter a hospital, whereas nurses solicit their positions; it should be impressed upon them that they should show to the patients the same kind of treatment that they would like to have accorded to themselves or to relatives or friends if they needed hospital care. They should be told what the attitude of nurses should be toward visitors; that when visitors enter the hospital they should be received courteously; and they should see to it that the patient has every opportunity that his or her condition will allow, to have a proper visit; and while of course the time of this should be limited, the nurse should explain this courteously and firmly when the patient's visitors enter the ward. In all questions of hospital administration and medical treatment nurses should refer the visitor to the proper officer. In matters of no special importance they should answer the patient or visitor, and give the information sought, in a way that would lead him or her to believe that this was their sole interest in life at the particular time. It is the duty of nurses to have visitors leave the hospital with a pleasant remembrance of the visit. They should neither ask of, nor give confidence to visitors; they should not show an undue interest in the private affairs of the patients or visitors, and under no conditions should they deport themselves in any other way than would be considered as good form in polite society. Nurses should be told what their attitude should be toward the employees with whom they work. Cruelty to patients and insubordination to officers should be dealt with by immediate dismissal; there should be no compromise in these matters. They should be told that in the performance of their duties they should be helpful to one another, and new nurses should be given every possible information necessary to make them good employees for the hospital. In their conduct towards their subordinate workers they should be firm and tactful, and at the same time kind, remembering that their differences in station are largely a question of advantages. Many a nurse has spoiled a good ward maid by failing to be firm and tactful, or by forgetting this admonition.

The supervising nurse or superintendent should keep an efficiency record of the nurses, and I think the most important item to be considered would be that of nursing instinct. Nurses are something like preachers; preachers may be turned out by theological schools as very effective theologians, and nurses may be made by training schools into highly educated and trained nurses, but only those that have been called are the ones that can give at the bedside of the very sick the comfort and care which is so satisfying to those to whom they minister. Unnecessary noise in the wards of the hospital may be a serious detriment to the restoration of patients to health. I have

recently received a complaint from a patient who was in a room off a private hall of a large hospital, where he told me that his stay was made hideous by the banging of doors, the rattling of dishes, the constant unnecessary tramping of visitors and employees along the hallway. All such practices should be stopped.

The attitude of all employees toward hospital property should be one of careful conservation. It is the duty of the superintendent to call the attention of nurses, as well as other employees, to their responsibility in handling hospital property. They should obey the rules laid down for its preservation, not because they are rules, but because they should feel that the conservation of the property is an obligation as binding on them as that of giving their full service to the nursing care of the patients.

The office of the hospital should be run along business lines. There should be a place for everything and everything in its place; this includes employees as well as records. Every hospital that deserves the name must be equipped with a proper register containing all the information of statistical and administrative character necessary to the making of vital statistics and the legal protection of the hospital. Except in emergency cases, the first medical thing that happens to a case on admission to a hospital is the taking of the history; its value depends upon the thoroughness and accuracy with which it is taken; its accuracy depends upon the ability of the doctor to draw out of the patient the salient points. What kind of a person do you propose to send to a patient to make on him the first and most lasting impression of your hospital? What kind of instruction is he to have from the medical and administrative staff to prepare him for this very responsible work? Do you ever think what this laying open of his life secrets means to the patient? Is his confidence and feeling to be lightly considered? I say no. Our duty is not fully performed if we fail to protect the hospital and the patient in this respect.

It is not the province of this paper to deal with the purely medical aspect of hospital management. It is assumed that every hospital is equipped with enough medical and surgical supplies and equipment to carry on its work, and that the medical talent devoted to it is equal to the demand made on it. I have known hospitals where histories were not kept beyond the necessary bookkeeping and registry requirements; such a condition is unfair to the hospital and to the patient; the commonwealth that supports the hospital, moreover, is entitled to the statistical data they fail to keep. Adequate medical records must be kept from which at the end of every fiscal year a medical report showing the value of the medical work performed can be issued.

Besides the clerical force of the office there should be stationed at the door some employee to receive visitors. I think that the best kind of an individual for this position is a maid, corresponding to the parlor maid in any well-regulated home. She should receive the visitor, show him to a seat, ask him the object of his visit, carry his card to the proper officer, and after delivering it return to him and tell him that he will be seen as soon as the business of the hospital will allow. I know of no officer in the institution who could give as much satisfaction to the visitor as the individual who meets him at the door. I have within the last few years stood trembling in the outer halls of a hospital awaiting an opportunity to make my wants known, where my request has been taken by an august person, so impressed with his own importance that he has filled me with astonishment. I have sat waiting in the hallway of another hospital awaiting developments for one hour after being shown to a seat. I have seen in the institutions under my own charge visitors met at the doorway with scant courtesy. They have been sent to the waiting room and left there uninformed as to how long they would have to wait, or whether their message had been given to any person in authority; and in every instance I have said that if opportunity ever offered I should certainly hold these examples up as the best illustration of what a hospital can do to show that it acts in direct opposition to the principles for which its name stands.

The telephone in the hospital is a medium for the quick sending of information from one department to another. It should always be remembered that a telephone order of any kind should be confirmed by an order in writing. The word of the man on either end is equally valuable, and if a balance were struck on the failure of management on account of telephone orders there would be a large deficit on the side of efficiency. Notices of death, serious conditions of patients, complicating conditions are best conveyed by telegrams. Inability on the part of the company to deliver the telegram will result in immediate notice of the sender to that effect. The trivial cost of the telegram is very small indeed as compared to the importance of the message conveyed, and you have an absolute witness to your effort to send reliable information properly and quickly. Special messengers, telephones and Uncle Sam's post are all good, but none of them to my mind are to be compared to the reliable telegraph company. Confirmation in writing of telephone communications leaves no question of doubt, and prevents an unnecessary distribution of responsibility for failure to comprehend or carry out instructions.

When patients are admitted to the hospital with complicating conditions on admission, which might give rise later to a question of whether or not the complication was a result of hospital management, it is well to give notice at once that the patient was admitted to the hospital suffering with the complication. This allows the friends and relatives to make immediate investigation, and releases the hospital from the necessity of an explanation when the patient is discharged.

The bookkeeping department of the hospital should be efficiently established. There is no hospital small enough to omit the keeping of books, the making of an inventory and the issuance of an annual report. The same thing is true in regard to the storehouse. Every hospital should receive its supplies in the form of stores and issue them from stores on requisitions written by the director of the activity needing them, countersigned by the superintendent. Requisitions on stores should be made on specially provided blanks from which, after stores have been issued, the books of the hospital can be posted. Additions to the inventory should be made regularly from the books of the hospital and deductions from the inventory should be made from lists of condemned articles presented to the employee in charge of the stores in exchange for the new ones desired. Close adherence to these rules insures two things: first, that all of a supply will be used; second, that an article of equipment will be worn out before being replaced, and that there will not be unnecessary duplication of an article in any activity. If the hospital is only large enough to have a very small number of employees, such a system should begin at the first. There is no stone in the foundation of the institution which is more important than this one. Bad finances usually indicate bad treatment. Supplies should be repeatedly inspected whether purchased on a specification or by the cook going out with the market basket. The quality of supplies should always be good. Where an attempt at economy

is practiced, by the purchase of low-grade food-stuffs, the amount of table waste and the loss in energy of employees will represent more money than would have been spent in the purchase of good foods in the first place.

Careless criticism of good food by a dyspeptic superintendent in the presence of patients and employees makes it bad food to them. All officers and employees should be cautioned against loud talking and against discussing the policies of the institution in the presence of any persons other than those to whom such policies are of personal and professional interest.

All hospitals see to it that medical attention is strictly given, but how few take any interest in the feeding of the patient. It is the bane of every hospital I have ever visited, where the wards are of a considerable size, that there is a singular disregard of the needs of the patient in the dining room. The dietary table of the dining room service should be so arranged as to contain the greatest variety of foods possible to the resources of the hospital.

The establishment of a basic dietary table will be found to be not only a convenience, but a saving proposition as well. A table of menus should be made and adhered to; and in making menus the heads of divisions should be consulted. It is better to give them what they want and restrict the variety, than to serve an abundance of things that they will not eat. You do not confer a favor on the various members of your menu committee when you appoint them, but you do make them perform their proper duties. Meals should be served in such a way that the recipients will not be able to tell by experience just what each day has in store for them in the way of food. Menus should be arranged numerically from one to ten, or fourteen or twenty-eight and repeat irregularly, not by week or month. In the arrangement of tables, neat linen, a center-piece of flowers, an assignment of chairs that enables congenial groups to be together, will add materially to the general good-will of employees. The enforcement of stringent regulations against diners at table ordering the serving girls or criticizing the service or the food, will do away with many complaints commonly made in the hospital about the diet and service. Constructive, helpful criticism about any part of the service should be invited and thankfully received in the office. This should be understood by employees and they should be encouraged to submit such in writing.

Choosing a cook is probably one of the biggest little things about a hospital. We all know the qualities that go to make up a good cook, but do we all know that half of the responsibility and half of the success of the cook rests on us? The average cook saves or wastes in direct proportion to the saving or wasteful disposition of the superintendent of the housekeeping end. The cook does not make the menus, but the menus often make the cook.

In a large hospital a dietitian is a useful and sometimes necessary adjunct. Her usefulness, like that of the cook, depends upon the common sense of her immediate superior. It is a joke to believe that you can feed people on calories; it is a calamity to reject the value of calories in balancing a ration. It is just as easy to give people food that they like and that contains the appropriate number of calories as it is to give them a highly nutritious but unappetizing food they don't like and won't eat.

For the last few years I have had a good many fool food ideas advanced to me. I have had a good many calorifically good but personally distasteful meals proposed to me, and I am more convinced than ever that it is food and not calories that is needed in the kitchens and dining rooms of our hospitals. Mark you, I said kitchens and dining rooms. In the office it should be calories. I should say that next to a knowledge of weights and measures a knowledge of calories is most valuable to a dietitian and a medical superintendent. Without a thorough knowledge of physiology I should say that a knowledge of calories was about as valuable to anybody as a sextant in a fog.

Recently the Department of Health, through its Bureau of Public Health Education, established an educational lunch room where the menus are printed in such a way as to show the food, its price, quantity, number of calories and protein in grams. The tendency of the present time seems to be toward a closer knowledge of food values, and, considering the hard work performed by nurses, the adoption of such a plan in the doctors' and nurses' dining room might add to their knowledge of how to take care of themselves as well as to supply them with information, that they may answer intelligently questions asked by patients about food values.

One of the big things in hospital work is the question of light, heat and power. We spend a lot of time and money in selecting the right kind of boilers, but we neglect to instruct our subordinates in how to fire them. We waste more money still in fuel saving devices, and we let a lot of heat units go up the chimney and a lot more go out with the cinders. In our wards we call for more steam, and when it gets too hot we open up transoms and windows instead of turning off the steam at the radiators.

We turn on a flood of light for some particular purpose, and when it has served its end we let it go on burning at eight cents per k. w. hour, or a dollar a thousand feet of gas, and wonder what other device we can get that will cut down the coal bills or the lighting bills. We allow water to drip from faucets until erosion has so injured them that they have to be reseated. We ought to have a noisy water meter in the office to remind us what we lose through neglecting leaks. Our carpenters and other mechanics should be trained to make minor repairs without specific orders. The grounds of the hospitals should be kept in a neat and clean condition.

I think the mortuary chapel and its attendants should receive our careful consideration. Somebody has said that there are three great events in the life of a man, his birth, his marriage and his death. In hospitals with an active service we are apt to forget the solemnity of death. We forget that in every death we are being shown the immutability of Nature, and, above all, we forget that what is one of the regrettable but inevitable incidents of routine of hospital work is a tragedy in the lives of the people who are left to mourn for those who die. The red tape of office business, the cold and careless, the sometimes almost callous treatment of the afflicted should be suppressed and a due consideration for the bereaved should be given them, even if this solemn event has not raised in us and all of our associates those meditations and reflections that undoubtedly it should.

You will find in one hospital engine room smooth-working machinery with no creaking or grinding of the parts. The engineer is on the job, he is giving the grease cups little turns, he is supplying little drops of oil here and there all the time, and his attention to small details is making all his work go without friction. In another hospital you will find creaking, grinding, rattling machinery due to carelessness and neglect of these things. It is just the same with your management of your hospital. The big engine will move and the hospital will go on with groans and complaints, all of which could be avoided by the attention to little things, the smallest of which is not too small to merit your attention if it but adds a little to the smooth running of the hospital or the comfort of a patient.

The Care of Cases of Mental Disease in General Hospitals[1]

BY HENRY M. HURD, M. D., Baltimore, Md.

When Benjamin Franklin wrote the petition to the General Assembly of Pennsylvania, which was the first step in the establishment of the Pennsylvania Hospital, in 1751, he based his plea largely upon the need of providing accommodations for the insane in this hospital no less than for the friendless nd homeless sick.

For many years thereafter provision was made for the insane by the Pennsylvania Hospital in the building on Pine Street, and, in fact, it was not until 1840 that the department for the insane was established as a separate institution in West Philadelphia.

The same course was pursued in the New York Hospital established in 1792. The insane there were at first housed in the same building, later in a building especially erected adjacent to the hospital, and it was not until 1822 that a separate institution was erected at Bloomingdale for the sole treatment of the insane.

In Boston in 1818 similar provision was planned and was only prevented from being carried into execution by the liberality of John McLean, who gave funds for a separate institution. I mention these little scraps of history to show that the care of the insane in the wards of general hospitals is no new thing.

The question very naturally occurs, "Why was this original plan given up?" The answer is very simple. In these early days the nature of insanity was imperfectly known and appreciated, and "insanity of conduct" was about the only form recognized, and the presence of excitement was largely the diagnostic sign of it. The active, demonstrative and irrepressible victim of excitement was alone considered to be insane. When he became quiet, even if he remained depressed and obviously unnatural or under the influence of delusions or mentally impaired, he was regarded cured. There was no longer any room for him in a hospital, as his need of care was not urgent, and he was accordingly discharged. Under the circumstances it often became necessary to provide for his care in an almshouse or a private family, or even in a strong room at his own home, if he remained irresponsible and incapable of earning his own living. Hospital care of the insane was at that time on the same footing as hospital care of the helpless and friendless sick. It was designed to meet emergencies only, and could never be regarded as a permanent provision for them. Insane persons who did not recover or who if quiet and self-controlled were not able to resume their places in the world as self-supporting citizens, could not remain in general hospitals indefinitely, because there were too many of them and hospitals were not arranged for their continued care; consequently separate provision was made for them.

It is now evident, however, that the exclusion of all insane persons from general hospitals has been a disadvantage to the hospital and to the insane, and has tended to place too much emphasis upon the legal aspects of insanity, and to obscure the view that insanity is a disease which ought to be treated promptly under the same conditions as other bodily diseases. This does not imply that many cases sooner or later do not require a legal commitment to an institution especially arranged for them. Many, unfortunately, cannot remain in a general hospital indefinitely because of the chronic character of their diseases; and often it is an advantage at one stage of recovery to get a change of scene; but many more persons can be successfully treated in general hospitals—upwards of 50 percent at least, according to the experience of the Albany Hospital—and will not need to go to a special hospital or require the formality of a legal commitment.

It is proper to state here that originally in many states the legal aspects of mental disease were not so prominently in public view and that patients at first were generally admitted to institutions without any legal formalities beyond certificates of insanity from one or two physicians. About forty years ago, however, largely through the pernicious activity of an uncured insane woman, so-called personal liberty bills were enacted in many states, which prevented all restraint of the liberty of an insane person without a prior decision as to insanity and an order of a court. In Illinois, in fact, for many years the victim of mental disease was arrested and taken into court upon the charge of insanity, a jury was impaneled, attorneys were assigned for prosecution and defense, and all the legal formalities of a trial were ended only by a verdict of "guilty of insanity" or "not guilty of insanity." This tended to prevent the early treatment of insanity by hopelessly complicating the diagnosis of a bodily disease with a question of law as to the propriety of custody for the purposes of treatment. As a result the existence of mental disease was felt to be in a degree a crime and treatment was not sought until the manifestations of it were so plain that even a jury could not mistake them.

The need of prompt care for such patients finally compelled the organization of detention hospitals in New York, Chicago, Philadelphia, Washington and other cities. The detention wards attached to Bellevue Hospital in New York may be regarded as the best examples of such places of detention. They furnish custody and give an opportunity to determine the need of commitment, but do not give hospital treatment. If persons are not violent enough to be deprived of liberty they cannot be detained. Hence, detention hospitals have had a limited usefulness as places of treatment and cannot be considered true hospitals.

A better arrangement has obtained at the Albany Hospital in what is known as Pavilion F. This consists of two wards of a large general hospital—one for each sex—arranged for the prompt treatment of mental cases, without the formality of any legal proceedings at the outbreak of mental disease, whenever the condition requires removal from home. These wards have been placed under the care of a skilled psychiatrist of large experience who has had a continuous service for upwards of twelve years. During this period, as is seen by the last report, 3,133 patients have been treated, of which number 1,670, or 53 percent, have been able to return to their homes without being sent to a special institution for mental diseases. The success of this pavilion is largely due to the skill of the attending physician and the confidence which its work has inspired in the community, so that patients have been admitted each year in largely increasing numbers.

There have also grown up in a few instances what have been termed psychopathic hospitals, modeled largely after those of Germany. The first of these was established by the state of Michigan at Ann Arbor in connection with the hospitals belonging to the state university. It was at first designed for the speedy treatment of cases of acute mental disease, but eventually it was very wisely brought into relations with the state hospitals for the insane and has been able to cooperate with them in furnishing the clinical diagnostic tests now required in pathological work and in the study of special forms of disease. The psychopathic hospital, however, constitutes a department of the general hospital and serves for the care and study of acute mental conditions.

[1]Paper read before the annual meeting of the American Hospital Association, San Francisco, June 24, 1915.

In Massachusetts a psychopathic hospital has been established in Boston as a branch of the Boston State Hospital. It furnishes facilities for the study and treatment of incipient and urgent cases of insanity, but it is not connected with a general hospital, although general hospital methods are employed and the nursing and staff organizations are similar.

In Baltimore the Henry Phipps Psychiatric Institute has been established as a department of the Johns Hopkins Hospital, in close proximity to its wards. The medical organization is similar, although separate, because of the special training of its medical officers, and its nursing is done by the pupils and graduates of the training school for nurses connected with the hospital. Its relations to the hospital are much the same as those of Pavilion F of the Albany Hospital.

In such psychopathic hospitals attached to general hospitals the obvious advantages are the greater activity of the medical service and the stimulating effect of an association with a general hospital. Both physicians and nurses are filled with the spirit of the hospital which stands for constant effort for the cure of patients. General hospital nurses and physicians in their turn feel the mighty influence of a department which gives itself without reserve to the sympathetic care of those who are suffering in mind as well as in body and who need the highest devotion of both physicians and nurses.

The disadvantages of such association should not be forgotten. The proximity of noisy or excited persons is often a source of annoyance or injury to persons in the adjacent wards who may be extremely ill or nervous. Many mental cases also soon feel the need of more abundant open-air exercise, such as is practicable only in an institution located in the country. Hence such a hospital ward must be regarded as an emergency provision for acute forms of mental trouble and cannot be expected to meet the wants of every form of disease for an indefinite time. It affords an opportunity to study the disease thoroughly and frequently permits the patient to return to his home restored to health without being subjected to a legal commitment to an institution. It is especially adapted to the special care of the various forms of delirium due to alcoholics or drugs, or to the toxic effects of fatigue or exhaustion, or to the toxemia of Bright's disease or acute febrile conditions.

If a general hospital is engaged in the education of medical men and nurses there are additional reasons why it is desirable that opportunities be afforded to these two classes of students to become familiar on the one hand with the recognition of forms of mental disorder and the best hospital methods of care, and on the other with nursing. These can be better learned by actual contact with such patients in general hospitals than by clinics or occasional visits to special hospitals, or by didactic lectures.

It is further important that the study of the phenomena of mental disease should be made obligatory upon medical students and nurses. Such disorders are encountered daily in the routine of general medical practice or of nursing. How few there are who are able to discriminate between a toxic delirium due to an infection, a fever, a poisoning by iodoform or some apparently harmless remedy used in medicine or surgery, etc., and a well-developed form of mental disease requiring close custody and watchful care! And yet the future of the patient may be permanently affected for weal or woe by the prompt recognition of the condition.

The nursing care of mental diseases can never be adequately accomplished until it is placed in the hands of educated women who are trained for it and are familiar with general nursing, but who need an insight into the higher privileges of the nurse which are acquired only by actual contact with mental cases. As Miss Taylor has recently said:

"The conclusion obviously to be drawn is that the woman is the important thing—one fitted by her natural inheritance and by her education—and the woman who is the most successful in this work is the one who has complete possession of herself; one who understands and appreciates human nature; one who has a keen sense of her relationship to others; who has judgment, patience, observation and tact; who knows the great advantage of silence, but at the same time knows when to speak; the woman who has had the broadest culture acquired by reading or travel, who has added to her general education many accomplishments, thus making her interesting, versatile and resourceful—such a woman we crave for our mentally ill patients. When more of the type above described are in our mental hospitals (and for that matter in our general hospitals as well) we may look for astounding results, even though the doctors are still debating over whether or not in dementia præcox there is a pathological change in the brain cell or whether psycho-analysis is the proper method of treatment to employ in functional neuroses. The nurse, properly equipped herself, who cooperates with the physician and enters into the life of her patient, can do more than anyone else to establish proper habits of thought. It is she who spends hours with the depressed patient, or the one whose mind is filled with the sordid things of life. If she can substitute from her own experience something else to take the place, if she has patience to plod on and courage to believe, as Dr. Osler says, that life is a habit—a succession of actions that become more or less automatic—that one trial after another, one failure after another, gives power, she will not become discouraged, though the process seems slow, but eventually will accomplish wonderful things. And not alone does the ideal nurse need physical and mental power, but she needs moral and spiritual power as well, for there is no kind of work, no association with humanity that brings one more in contact with the grosser side of life than does mental work. Thus it is she needs the uplifting support which comes alone through contact with the moral and spiritual influence."[1]

Nothing could more clearly represent the advantage of the attitude of mind which the educated woman nurse brings to the discharge of her duties when placed in charge of mental disorders. She looks upon nursing from the standpoint of the relief of bodily disease and has little or no sympathy with the old-time attitude which so long characterized those who had charge of mental cases, derived largely from the traditional belief that their condition was due to demoniacal possession and was to be relieved not by kindness and sympathetic care and good nursing, but by seclusion, confinement and constant repression. While therefore the educated woman nurse is needed for the care of mental disorders it must not be forgotten that she equally needs the experience which such care brings to her. The tendency of the nursing of bodily disorders is towards routine and uniformity. This is especially true of surgical nursing. Much of the work of a nurse is an exact science and appeals to the head more than to the heart, and there is always danger that her attitude towards her profession will become cold and impersonal. The nurse sometimes becomes a stickler for hours of duty and daily life according to a formula and does not develop an active sympathy for her patients and a personal interest in their sufferings. The nursing of mental cases changes all this. The patient is no longer a mere case of some interesting form of bodily disease, but a suffering human being who may be led from the darkness of gloom or of mental irresponsibility into the light of reason and clearness of mental vision by the personal

[1]Johns Hopkins Hospital Nurses' Alumnæ Magazine, October, 1914.

work of the sympathetic, enlightened and unselfish nurse. The "vision splendid" once given to her can never be forgotten and will have a lifelong influence.

To descend to a lower level, as a reason for utilizing wards in general hospitals for the treatment of mental cases, the manifest economy to the state may be added. It has been found in the experience of Pavilion F at the Albany Hospital that at least fifty percent of the patients admitted do not need to go to any other institution, but are able to return home restored to health or so far improved that a subsequent convalescence is assured. The future of the patient is secured, and the legal, commercial and social evils which threaten a man who has been committed to an institution for the insane are avoided. Such prompt care and successful treatment of several hundred mental cases each year give relief at a time when the mental disorder generally presses most severely upon the family, and hope is not extinguished, as it so often is when a patient is legally committed to a state hospital.

It is evident that the crux of the situation in such cases is prompt and enlightened treatment. This should be secured without legal formalities precisely as admission is secured to any general hospital. If patients require to be committed legally, they should be sent to state hospitals where legal authority exists for their detention. As long as patients are willing to remain informally and can do so with safety to themselves or their associates, they should be given an opportunity to receive hospital treatment. If they are violent, turbulent, homicidal or suicidal they should go elsewhere. If patients, however, are admitted early without legal formalities the danger of the development of these unpleasant characteristics is much diminished. The use of general hospitals for the prompt and efficient treatment of mental cases is, in the writer's opinion, of the utmost importance in every city large enough to supply sufficient patients to enable the hospital authorities to do systematic and efficient work. It is useless to attempt to use a general hospital for mental cases unless proper medical and nursing care can be assured in wards especially equipped for them.

SISTERS' HOSPITAL ASSOCIATION OF THE NORTHWEST

Papers Read at the Milwaukee Convention, June 24-26

Staff Organization[1]

BY R. E. CASTELAW, M. D., Kansas City, Mo.

Refer me to a hospital that is meeting its full measure of responsibility to the community, that is rendering scientific service to the patient, that is offering an example of thrift, honor and efficiency, and I will show you an institution that is in sympathy with, and that enjoys the full confidence of, its medical staff.

The staff is the predominating factor in every hospital and its character and policy will largely determine success or failure. The influence of one member who has a low standard of responsibility will outweigh the influence of a dozen high-class men with whom he is associated. Individuals are known by the company they keep; hospitals are measured by the sort of men composing, and the plan of organization of their medical staffs.

In this paper I shall mention very briefly something of the importance of selecting men for staff positions who are suited by training and temperament for the work; of the hospital organized for the care of a special class of workers or for the treatment of special diseases; of the general hospital and some of its difficult problems of staff organization, with a closing word on the relation of the staff to other hospital departments.

Upon the character of the hospital and the needs of the community will depend the plan of organization of the medical staff. If a hospital is established to meet the demands of an industrial plant of some kind, or a railroad, or, in fact, any class of special workers, the problem of a staff is an easy one. The chief surgeon or medical superintendent has under his direction the working of the entire hospital scheme, and the plan of staff organization simply meets the requirements of the particular service. The one in charge is responsible to the officials of the company, and much of the work is routine, as the same system obtains in the hospital department as is found in other branches of the concern.

If the institution is a hospital established for the treatment of special diseases, such as tuberculosis, diseases of the skin and cancer, or diseases of the nervous system, a plan must be worked out to meet the individual needs of each. Systematic and scientific study and research have made these hospitals a necessity; but time forbids a discussion of their staff organization in this paper.

Let us now pass from the consideration of the special institution and turn to the general hospital, since I am assuming that a majority of those here today are especially interested in matters pertaining to the staff organization of an institution whose scope of service includes the care of patients in all the various branches of medicine. For the practical purposes of this discussion I think we can agree that the term "staff" will include all that branch of service which has to do with the scientific care of the patient. Here the authority of the staff should end, and the executive department, whether it be composed of a special committee or a superintendent, should have charge of all other hospital matters.

Usually the first thing considered, when a community begins to find itself in need of a hospital, is the staff membership and organization. If it so happens that there is no one in the locality who has had experience in such matters, many and serious mistakes may be made. Everyone agrees that the staff must be composed of high-grade, properly trained men. Reasoning from this point of view popular and prominent physicians with large practices, or those who might influence financial aid, are often given the most important places on the staff. In some instances this may be a feasible plan, but it usually results in placing in important positions those who, for want of time, or for lack of inclination, or on account of insufficient training and experience, are not at all suited for the work assigned them. This immediately places a handicap on the entire working plan of the hospital. Because a physician is popular in his community, or because he may be able to influence gifts from well-to-do families in which he may practice, or because of his social prominence, it does not follow that his addition to the medical staff will add to the strength or dignity of the institution. In this day and age something more is demanded. This is a time of special knowledge. The hospital laboratory of chemistry, pathology and bacteriology, the use of all sorts of new diagnostic apparatus, the ever changing idea of the applications of therapy, call for men able to meet the added responsibilities of modern technical methods.

I am quite certain that in a large majority of cases it would be far better to appoint men to staff positions who have been trained according to the later idea of medical teaching, possibly in a school that demands the fifth, or so-

[1]Paper read before the Hospital Sisters' Conference, Milwaukee, June 25, 1915.

called hospital year before the student graduates. Young men of this type are usually good students and their time is largely occupied in study, hence they must of necessity acquire a practice very slowly. In this class of men hospitals find physicians with time to attend properly to the work, with sufficient inclination to create a lively interest in it, and with enough ambition to work in harmony with the other departments in an effort to develop a reputation for scientific work in the institution.

After the staff has been selected, usually by a board of trustees, it may be divided into three divisions, viz., the consulting staff, the visiting staff, and the resident staff.

The first division is usually composed of the older men who have passed the active stage of their career, but whose judgment and large experience make them invaluable as consultants and advisers. Men of this type are generally willing to give freely of their time to committee work and regard it as an honor to assist and advise with the executive department. The institution has their warmest sympathies, and a great mistake is made if, because they are somewhat behind in scientific matters, they are in any way ignored. The hospital having a high-grade consulting staff is indeed to be congratulated.

Upon the second division of the medical staff will fall the responsibility of making or unmaking the hospital. The men composing this group should be selected from the active, ambitious men; men trained in high-class schools, and, if possible, with hospital experience as residents. Too great care cannot be given the matter of selecting the visiting staff. Everything must be set aside for honesty, ability and faithfulness, for these men will have not only the responsibility of the care of their own private patients, but they must give the free cases equally good care and attention. Aside from the supervision of his private cases and free service the staff physician must meet the responsibility of properly coaching and training his resident. This is a difficult problem. "As the twig is bent, so is the tree inclined," and as the young physician is trained so is his bent in after life. Many young physicians, representing a splendid type of manhood, might date the beginning of their professional failure from their resident days. The chief of a given service should have his division so organized that he can step into a ward and obtain all of the information regarding his cases without delay. Additional notes of all kinds and results of subsequent special examinations should be so entered on the chart that it will be an easy matter for him to grasp his patient's condition at once. Careful history taking and routine examination must be encouraged and in some instances demanded. The taking of complete systematic case records by the resident staff; the signature of visiting staff members over diagnosis or opinion, and the systematic filing by a competent clerk of all case records, with diagnosis, treatment and results, are essential to the success of any hospital. The resident should be permitted to advance just as rapidly as his ability and energy will permit. Experienced residents are usually competent to do minor operations and to assume responsibility for a diagnosis or outlining a course of treatment.

The third division of the staff, namely, the resident staff, is a very important part of the unit and many times is a matter of great concern to the hospital management. The selection of men for the resident service calls for great discretion and judgment. Graduates of the high-grade schools are likely to be satisfactory residents, but this is not always true. Some of the best residents graduate from very mediocre colleges. The school does not make the man. Neither will the man making the highest grade in a competitive examination always render the best service. It takes more than a technical knowledge of anatomy and physiology to make a good resident physician. Education and training will go a long way in the matter, but there must be the inclination on the part of the individual to adjust himself to many trying conditions or his work will probably be unsatisfactory. It seems to be very difficult for young men just out of school to realize that they are no longer boys, but men with some very serious responsibilities just ahead of them. It is not unusual for strikes, and other very undignified procedures to take place in some hospitals and to be reported in our daily press dispatches. The refusal of residents to submit to reasonable supervision and regulation has in some instances made it necessary to consider plans to do away entirely with the resident service. Inquiry among staff physicians of some hospitals indicate that they would prefer to organize their own unit and assume the additional responsibility rather than undertake to train properly a young man who has inherited a natural tendency to have all the so-called fun he can and to do just as little work as will insure his position on the service. Junior assistants could be selected from men who have been out of school for a year or two, yet who have been unfortunate in not securing a resident service at the time of graduation. This plan is a very feasible one and has some splendid points. Prominent men of all the various departments of the staff say they are constantly besieged by young practitioners of no ordinary ability who desire to do hospital work. These voluntary assistants would approach their work with a definite and serious idea of their duties, which would eliminate many sources of contention. It is believed by some administrators that unless the young physician can be taught a different regard for the patient, the nursing, and the departments with which he must find himself in daily contact, along with a disposition to meet his responsibilities with a more tractable attitude, that some plan must of necessity be devised that will do away with the present one now in force in many hospitals.

However, the plan now under consideration by the Council on Medical Education of the American Medical Association may assist in adjusting this situation. A list of hospitals accepted as teaching institutions, in which the hospital year may be given, will do much toward assisting all of the interested parties in reaching a solution of what now appears to be a very perplexing problem. Diplomas will not be issued until the graduate has served his hospital year in a satisfactory manner in an approved institution. This alone should do much toward insuring better work and curbing the tendency of the resident to override reasonable rules and regulations.

While the visiting staff may not have the last word in employing the hospital pathologist and bacteriologist, the duties of these laboratory men are so closely related to the proper working of the staff machinery that this department must be regarded as a part of the staff organization. The laboratory records, the scientific policy, the matter of promptly dispatching emergency work, the study of postmortems, and the development of research work, are all important factors in the general scientific activities of the institution. The hospital executive and staff must stand shoulder to shoulder in seeing that suitable men are employed and that team work is a feature. Otherwise the opportunity presents itself for a decidedly weak link in the chain of organization.

It is my opinion that the interests of the hospital are best served by keeping the staff as small as possible and the terms of service correspondingly long. There is noth-

ing gained by a large number of staff physicians with frequent changes, and the problems of organization are much simplified by a small staff with a long, continuous service.

The number of men on the staff will depend on several conditions, the principal one being the number of patients on the various services. However, the hospital should not impose on the time of the visiting physician by expecting him to spend more time in the free wards than he can afford. He cannot be expected to waste any of his time standing about the building waiting for a report from the laboratory, or for the blood pressure of a patient to be taken, or for a family history of another patient to be developed. As before indicated, these data should be handed him complete, arranged beforehand by the junior and resident. Information regarding a case should be so thoroughly prepared that the chief will be required to spend only from ten to twenty minutes with each new patient. The above is applicable to all services, and some such plan is positively necessary if the work is to be disposed of with precision and dispatch.

The demands made upon the staff service of the ordinary general hospital can usually be satisfied by dividing the scientific department into the medical, surgical and special services. The special services will include such lines of work as the eye, ear, nose and throat, obstetric, pediatric, and possibly others. Many specialties should be discouraged, for economical and other good reasons. Several factors might determine which should be the largest service in a given institution, but this does not particularly interest us at this time; for convenience of handling, the special cases can be grouped with the larger medical and surgical services. For instance, the eye, ear, nose and throat cases go well with surgery. Obstetric and pediatric cases are suited better to the medical side; nervous, genito-urinary and other special cases must be handled as the occasion demands. However, it is important that the staff machinery be not clogged with too many different special branches; it furnishes an excellent opportunity for discord and argument among the various services as to just what service a certain very desirable case should be assigned. Upon the chief of each principal service must be placed the responsibility for conducting its affairs in such a way that the professional and ethical standing of the hospital cannot be questioned. It is generally necessary for the chief to have a junior, and it is a good plan to let him make his own selection. The three physicians, the chief, the junior and resident, compose a service unit.

The chief must be a leader and must possess executive ability. His professional calibre should be such that he may be expected to serve on the active staff until he retires to the consulting staff, and is succeeded by his junior; provided, of course, that the junior's ability will warrant the promotion—and if it does not it is hardly worth while to retain him longer as a junior. This sort of plan may appear selfish, but it makes hospital efficiency, and that is the legitimate end of all our efforts. The chief should be so big and broad in his ideas that there will be no complaint from his junior and resident that they are not getting real work—that they are nothing more than "male nurses."

The junior should be trusted to make visits alone and should have the control of the resident and all routine work. During vacation time he should have temporary charge of the service. Under the direction of his chief he should do uncomplicated operations and in time should be perfectly competent to handle anything that may appear on the service.

The resident should gradually grow into the work. Under the supervision of the junior he should do all the dressings on the surgical service. He can soon, then, be trusted to close incisions, or to do the initial work for an appendectomy or herniotomy. It is surprising how fast he will learn. Before the chief realizes it, the resident will be able to handle, unassisted, much of the routine work.

The chief of the service should have unlimited power in all matters pertaining to his division. His word should be law. It cannot be otherwise if he is held accountable for the work assigned him.

The same plan may obtain in the medical division. Case histories and routine examinations should be developed by the resident under the supervision of the junior. Special examinations, such as blood work, heart tracings and kidney function tests can hardly be classed as routine, and the junior should be held responsible for this class of work. Under any and all circumstances the junior and resident must be encouraged and made to feel that they will be advanced and given additional responsibility just as their work will merit it. The long course of preparatory school work, in addition to the extended college course now demanded of medical students, almost precludes a physician from entering practice until he is well along toward thirty years of age. In order that the staff members may be advanced from junior to senior positions without too much delay, a retiring age of fifty or fifty-five is desirable. If a man receives his appointment as senior of a service at thirty-five, surely he should be willing to retire from active attendance with fifteen or twenty years of service to his credit.

Now for a closing word regarding a most important factor in staff organization and its relation to other hospital departments. I refer to team work. What shall be gained if a hospital has a perfect staff organization and yet cannot obtain the cooperation of the nursing service, or the department of dietetics; or if the resident service is incompetent or unwilling to dovetail its work with another department? A fixed, definite policy must be agreed upon by the several departments and each must do its part toward carrying it out to the letter. The various staff divisions should confer, when necessary, regarding borderline cases. One large hospital in Philadelphia has a scheme of ward conferences. At regular stated times a surgeon, and the entire medical staff on duty at the time, with possibly a member of the consulting staff, meet and study cases presenting interesting problems in diagnosis and treatment. These are fully discussed from the different angles. The residents are invited to attend these conferences and are greatly benefited by them. In addition, a cordial fellowship between all is promoted.

The staff, or a committee composed of staff members, should meet at regular intervals with the superintendent and discuss and determine the scientific and economic policy of the institution. Preventive medicine, the problems of occupational and industrial diseases, social service, the relation of contract practice to the staff and hospital, are but a few of the many questions that are today occupying the attention of our institution administrators.

There are several other phases of staff organization that should have had consideration in this paper. The fifth, or so-called hospital year, will be demanded of graduates of many of our best schools. The plan adopted by at least one hospital of paying a salary to the chief of each staff division and asking continuous service; the question of an open or closed staff; these are all very important matters, and sooner or later every hospital must find itself face to face with them.

The Training School[1]

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The theme of this paper has so wide a range and in all probability is so well understood in its various aspects by this audience that it has been exceedingly difficult to know what to say. I have elected to present to you a word sketch of a real training school, its organization and component parts, its guiding principles and the methods by which it prepares suitable young women to become leading members of one of the noblest professions open to women—trusting that you will pardon this repetition of much that is elementary to you.

The Michael Reese Hospital and Training School for Nurses, in Chicago, is the institution in whose atmosphere I have acquired most of my views on this subject, and for the many details to follow I am greatly indebted to the school superintendent, Miss Elizabeth C. Burgess, R. N. (N. Y.), the assistant superintendent, Miss Charles, and to each of the department heads as well.

The training school consists of a superintendent, assistant superintendent, an office force, including a teacher, thirteen paid clinical supervisors (graduate nurses), a dietitian, domestic science teacher and two social service investigators. There are from fifteen to thirty probationers, ninety pupils, ten seniors from affiliated schools, about five post-graduates doing special work, and fifteen nursery maids.

The three-year course includes practical experience in medicine six months, surgery six months, obstetrics three to four months, gynecology one and one-half months, children and infants three months, private patients three months, diet kitchen one month, operating room four months, supply room one month, and night duty three periods of two months each. Vacation of six weeks in two periods; and the remaining six months is devoted to specialization, executive training and social service work.

The problem of the training school begins with the selection of the applicant. Who shall be eligible? As you are all aware, it is not so many decades since nursing was in the hands of whomsoever saw fit to announce themselves as nurses; but the standards have gone up here, as in every other walk of life, and the applicant must have qualifications far higher than in olden times.

Needless to point out the candidate must be of good moral character. Included in this, and especially worthy of emphasis, is her conscientiousness. She must be healthy. How important this is only those of you can appreciate who have seen latent flaws reveal themselves under the stress and strain of the hard daily grind. The victims of unsuspected heart lesions, the incipient goitres, the gastro-intestinal ailments, the broken arches, the diseased tonsils and teeth, must be watched, gauged and if necessary eliminated from the probationers by your examining physicians, in justice to the applicant herself, lest her health be permanently shattered by the three years of strenuous work and discipline. She must have a proper preliminary education. This is set at a four years' high school course, or its equivalent, by the best training schools, and when one considers what the trained nurse of today is expected to grasp and understand, that is not too high a standard. Twenty is commonly held to be the youngest age at which the average probationer has the necessary poise and maturity to justify the demands that will be made of her.

The accepted applicant enters a period of three months' probation. This is vitally essential. It enables the responsible heads to form a fairly good judgment of the candidates and helps the probationer to crystallize her own feelings and desires.

During this period the candidates receive the following instructions:

Six classes, 2 hours each, in bandaging; 24 classes, 1½ hours each, in anatomy and physiology; 8 classes, 1½ hours each, in bacteriology; 12 classes, 1 hour each, in solutions, including simple arithmetic and the metric system; 8 classes, 1 hour each, on personal and domestic hygiene; 6 classes, 2 hours each, on elementary dietetics with practical lessons; 1 study hour daily, and 2 to 3 hours daily of practical work in the wards and supply room; 24 classes of 2 hours' duration.

Each finished lesson is practiced in the wards under supervisors. The subjects covered may be briefly enumerated as follows:

The making of an empty bed; the making of a bed containing a patient (a dummy is used in these lessons).

The significance of hospital dusting, using warm water, green castile soap, ammonia, a soft cloth and elbow grease —never sapolio on enamel and never dry-dusting.

The importance of closing the window, not exposing the patient, moving the patient as little as possible and turning the patient toward the nurse; warming the clean linens and making the bed firm and tight.

The care of the bed after the patient leaves the hospital: washing with 5 percent carbolic acid or 2½ percent formalin, and soaking linens two hours in infectious cases.

The daily care of the patient: washing the back with hot water and soap, rubbing with 50 percent alcohol and powdering with talcum. If red, using stearate of zinc; avoiding cotton pads; turning frequently and if heavy or perspiring treating the back repeatedly, using air-cushions and even an air mattress. (Since these cost $30 to $40 no pins should be used near them.)

Cleansing the mouth with swab sticks, getting into all the crevices.

Inspecting the hair daily, especially after visiting hours, and combing daily (by the patient, if able).

The cleansing bath, with hot water: placing patient between blankets, turning as little as possible; washing a small area at a time, as speedily and carefully as possible, not omitting hair and nails.

Handling of bed pans; avoiding hitting the coccyx by lifting with one hand under the sacrum. Never set a pan on the floor. Pans to be boiled daily.

The operative bed: must be hot, with a woolen blanket next the patient. There must be no draughts and the nurse must watch the pulse, recording same every half hour, also the color, the accumulation of mucus in the throat; and must get help as needed.

The fracture bed: linens to be smooth and a fracture board over the springs, the full size of the springs, and perforated. The Bradford frame for spinal and hip cases and especially for children.

Washing hair in bed: requires only turning the patient on the side and arranging a rubber apron around the neck behind and over the side of the bed.

Arranging a patient for sitting up in bed: all parts, especially the arms, must be supported; a knee roll used and a sling for the feet if desirable. The patient must be warm and pulse noted before, during and after sitting.

Admitting a stretcher case: temperature, pulse, respiration, and bath according to condition of patient. Specimen of urine to be obtained. Note all marks, burns, bruises and deformities; clothing and valuables must be listed,

[1]Read before the Hospital Sisters' Conference, Milwaukee, June 25, 1915.

mentioning everything, and if taken away must still be listed and signed for by party removing them.

Enemata: water 100°, no air in tube; patient on left side. Nutritives: no air in tube; patient comfortably placed first and after removing tube, making pressure against anus.

Plasters: mustard must be fresh and the water only warm; diluting with flour as desired. Flaxseed dropped into boiling water, thickening until it drips clean from the spoon, then turning out the flame, beating to make it light and oiling the skin. Folding and tucking free end in; on removal patting the skin dry and powdering. Turpentine stupes, either equal parts turpentine and oil applied and covered with hot blanket cloth, or turpentine one teaspoonful to boiling water one quart (turning out flame), oiling the skin and wringing out fresh hot cloths every five minutes for twenty minutes in each hour.

The keeping of charts: the time of each recording; the necessity for recording everything, including the most trivial symptoms, with intelligence and brevity.

Gastric lavage in bed and with the patient's back supported, and both patient and floor protected.

Transferring helpless patients, supporting arms and head and all lifting together.

The changing of a mattress by shifting the patient onto a row of pillows.

The hot pack: avoidance of burns; never placing a hot bag over a moist dressing. Cold cloths to the head and control of the pulse.

Preparing a patient for examination in various positions, dorsal, lithotomy, knee, chest, Sims, without undue exposure.

Catheterization: its asepsis and technic.

Surgical dressings: convenience of arrangement to obviate necessity for reaching on the part of the physician, thus affording greater speed and certainty of asepsis.

Preparation of croup tents with precautions for the alcohol lamp if used.

Care of the hypodermic tray, including the proper way of giving various kinds of hypodermics.

The accepted pupils now have before them two and three-quarters years of arduous but intensely interesting work, and one of the big tasks of the school superintendent is to lay out the curriculum so that each nurse gets adequate minimal training in all branches, and special training in the branch of her choice when possible, maintaining a proper proportion of experienced and inexperienced nurses in all departments at all times.

The attainment of this ideal is of course most easily reached in the general hospitals, but by a system of exchanges with credit the hospitals which lack certain departments can provide their pupils with the full clinical curriculum. The Michael Reese Training School has affiliates in the maternity and children's building, postgraduates in the children's building and operating room, and nursery maids, who take a year's training, eight months in the children's building and four months in the maternity nursery.

It may not be amiss at this point to outline briefly for you the routine and special instruction in the various departments by which the young pupil gradually gets an increasing responsibility and eventually becomes a capable, self-reliant graduate. Certain qualities are sought for and encouraged throughout the school, such as conscientiousness, power of observation, cheerfulness, patience, tact, noiselessness. The lessons of the probation months are firmly fixed, and dominating all are the watchwords efficiency and asepsis.

Class work is continued on a greatly reduced scale, juniors receiving about 5 hours of theory and practical class instruction per week, intermediates and seniors about 4 hours per week; classes in pediatrics are repeated every four months to accommodate the many affiliates and postgraduates, and all practical work is taught in small sections.

In the wards each nurse is assigned certain work, according to her experience, and this she does first each day before assisting in any other work. Cleanliness and neatness must be maintained, paper bags being supplied each patient for refuse. Patients on liquid diet are fed at stated hours. Chart recording is done by the nurse directly concerned, except in the maternity, where, for special reasons, one nurse enters up all ward records.

The operating suite, consisting of three main rooms, two specials, a nose and throat room, a genito-urinary room, and three rooms in the children's building is run by a head nurse, two permanent paid assistants and eight pupil nurses, chiefly seniors. Each pupil passes through the following stations:

1. Preparatory room, where under an experienced nurse she learns the positions, dorsal, lithotomy, Trendelenburg, Sims, gall-bladder, kidney and goitre, and the practice of asepsis in preparing the field of operation.
2. Junior in nose and throat cases; here she helps.
3. Senior in nose and throat cases; runs the cases.
4. Care of gloves. Each pair is placed in an individual bag, unfolded. Supplies: The nurse scrubs up before preparing any sterile supplies. Care of instruments, names, matching, uses and preparation of trays for set operations. Sutures of all kinds, wax silk, plain silk, silkworm, horsehair, Bartlett's catgut and VanHorn catgut.
5. Junior in operating room; here she helps.
6. Senior in operating room; runs minor cases.
7. Senior in operating room; runs major cases.

Here, especially, does the nurse learn self-reliance, alertness, deftness, and the special technic and peculiarities of her various attending surgeons.

Maternity pupils receive training first as juniors or intermediates and again as seniors, each time for about two months. Here, as in the operating suite, asepsis is preached continually. In the ward the nurse learns how to apply breast and abdominal binders, the nipples being cleansed with a boric acid swab before nursings and covered with a sterile cloth between nursings, the breasts being supported upward and all safety pins placed in a vertical row, slightly overlapping. Vulvar pads made of a layer of absorbent and another of unabsorbent cotton rolled with the absorbent cotton inside, wrapped separately and sterile; must be handled when open only on the unabsorbent side, the absorbent side being placed next the genitals. The lochia should never soil the bedding. Bed pans are boiled daily and after each evacuation, and with each use the genitals are cleansed by pouring lysol solution. Temperatures are taken per rectum with patient lying on side, at the same time inspecting the perineum. All blankets and mattresses are sterilized from time to time.

In the maternity nursery babies are stripped and inspected daily, guarding the cord from contamination. At this time each baby is placed on its own towel, and in the daily weighing the scale pan is completely covered with a towel for each baby. The bathing proceeds from the head downward, leaving the boric cleansing of the eyes for the last. Any suspicious case is kept in the quarantine nursery.

In admitting a case the nurse asks as to pains, their

location, frequency and character; whether the membranes have ruptured, presence of a bloody discharge and the number of the pregnancy. If the pains are not severe the patient receives an enema, then a bath, given with patient sitting on a spring seat covered with a towel. In the labor room the genitals are shaved, a specimen of urine is obtained, the nipples are cleansed again with 1-6000 bichloride of mercury.

Observation here includes frequent noting of heart tones and always immediately after ruptures of membranes. Description of pains. Genitals kept protected by sterile combination, which is held from sliding forward. Patient kept in bed unless ordered up. Toilet facilities limited to use of jar with bottom covered with toilet paper.

Running a case begins with the scrubbing of the patient by a nurse who has first scrubbed up herself. The genitals are cleansed first, then the thighs and lastly the anal region and the whole area is thoroughly rinsed by pouring lysol. The nurse again scrubs up and lays out her sterile linens and routine supplies, which she later places at the foot of the bed, according to a very definite routine. All other instruments are kept sterile, ready and sealed.

The new babies' eyes and cord receive prompt attention and the fundus is held thirty minutes after the placenta is delivered before applying a binder. Women in waiting have temperature, pulse and heart tones taken three times daily; those delivered have temperature and pulse three times daily in normal cases.

In the children's building children and infants remain in the observation wards at least three days. In the daily bathing here and later, the skin is examined for eruptions, the ears, mouth, navel and vulva for odors or discharge, and in washing boiled soap is used, making few suds and avoiding the ear canals.

On admission every patient gets a tub bath, a parasiticide application to the head, and if there is a temperature of 103° rectal, ice bag to head, hot water bag to the feet and awaits doctor's orders.

In lap bathing of infants, each babe is held on its own towel and the nurse washes her own hands between cases. Babies with colds, running ears, etc., are separated.

Neatness of child and ward are maintained at all times. Food is served individually, the kind and amount taken is noted, and, where necessary, vegetables are served first. If the child vomits it is fed again. If one baby chafes that is treated *per se*. If several chafe, rinsing of the diapers is investigated and if they are found acid to litmus this places the blame on the laundering.

Charts are kept very accurately, keys being used to facilitate the recording. There are enough nipples so that each infant has one for each feeding for the day. The nurse is never permitted to handle the nipple tip. Used nipples are rinsed in cold water, boiled in soap and water, rinsed again and boiled in water with sodium bicarbonate.

Thermometers are individual, and like rectal tubes are lubricated only with water. Toys are never interchanged, paper and other destructible toys being preferred. A kindergartner is in daily attendance, teaching the nursery maid and such nurses as are interested in ways of amusing children.

Cases of communicable diseases arising anywhere in the hospital are sent to the isolation building with that exposed nurse who has had the particular disease.

In the diet kitchen and milk station the nurse receives special drill from the heads of these important divisions.

In the care of private patients it becomes necessary to speak of seeming trivialities. But these are the very things that mark the trained nurse. The daily routine is as follows: in the morning the room air is freshened, the bed pan is brought warm, patient's hand and face washed, tooth brush brought, drinking water supplied, and then breakfast is served. Bath given between blankets, avoiding drafts, followed by an alcohol rub and a rest. (The nurse must be sure her own hands are warm.) The bed is made up. The 10 a. m. lunch is served. Dinner at twelve, followed by a rest. Visitors are controlled as to the length of stay and number, according to the doctor's orders. Supper at 5, followed by a wash, back rub, straightening up of bed and room, shade drawn, light arranged for reading, phone muffled if desired. Medication and treatments as written in the physician's order book.

Trays must be constantly supervised, stress being laid on quality and daintiness rather than quantity. Gargles, egg-nogs and milk partially consumed, water pitchers, etc., must be kept covered. Priessnitz dressings should not be too wet. Place patient on a draw blanket. Make sure the extremities are always warm, avoid drafts when up and make the first time up very brief. Pay special attention to separating dishes, etc., in infectious throat cases and in operative nose and throat cases. The abdominal posture reveals hemorrhage, which should be controlled by ice applications until further orders.

Answer calls promptly even if unable to render service at the moment. Convey all complaints, however trivial, to the head nurse. Discourage in every way possible the circulation of gossip from room to room.

Didactic teaching has its place in the curriculum of the undergraduate nurse, the more so since the states have begun to standardize nurses, hold examinations and give the degree of R. N.

I am sure we are all agreed that bedside nursing is the true function of the trained nurse, hence a nice discrimination must be shown by those responsible for the didactic curriculum. The happiest solution, I believe, is to place the pre-medical and medical courses in the hands of a permanent teaching corps, chosen from among the members of the attending staff who should be best qualified to pick out for the classes those salient facts that will aid the nurse in an intelligent grasp of her duties and obligations without burdening her with strictly medical data.

Limitations in time prohibit a discussion of certain phases of training school life which are too important not to mention, such as the home life, food, exercise, sleep and the social side.

And now I arrive at the heart of the problem. The master word in the successful training school is efficiency, and the efficient training school is that school headed by a broad-minded, progressive superintendent, assisted by able department heads, and whose pupils are likewise under the daily, I might say the hourly, guidance and precept of a willing and competent attending medical staff. These are the men or types of men with whom and for whom a graduate nurse must work, and the more closely her undergraduate activities are coached by them the more efficient will she become in the practice of her profession.

At the recent annual convention of the Montana Graduate Nurses' Association, held in Great Falls, officers were elected as follows: Miss E. Augusta Ariss, of Great Falls, president; Miss Van Leuvanee, of Helena, first vice-president; Sister Mary Corona, of Butte, second vice-president; Mrs. I. C. Benson, of Fromberg, corresponding secretary; Miss Mary Denny, of Great Falls, recording secretary; Miss O'Brien, of Butte, treasurer. Miss Margaret Hughes, of Helena, was elected delegate to the national convention in San Francisco. Helena was selected as the next annual meeting place of the association.

CURRENT HOSPITAL LITERATURE

ALBERT ALLEMANN, M. D., Foreign Literature.
Army Medical Museum and Library, Office of the Surgeon-General United States Army.

The Penetration of Formaldehyde Vapor in Steam Disinfectors, With or Without Diminished Pressure. Dr. Otto Mayer, Bacteriological Institute, London. Lancet-Clinic, Cincinnati, Feb. 6, 1915.

Dr. Mayer writes of an apparatus which he has recently designed, by which formaldehyde gas is let into both sides of the sterilizer, the vapor being generated from a formalin lamp. He thinks that perfect sterilization—that is, the destruction of micro-organisms—can be accomplished without the very high temperatures that have been heretofore considered necessary; but there are many technical difficulties which he is now engaged in attempting to solve.

British Water Ambulance. The Nursing Times, London, 1915, Vol. XI, No. 519.

The War Office has taken over six barges at Rouen and equipped four as hospital barges, one as a staff barge and one as a general store barge. Each hospital barge contains fifty large-sized hospital beds, a surgical dressing room, linen room, storeroom and well-equipped kitchen. They are well ventilated, heated, and fitted with electric lights. Specially constructed skylights admit ample light during the day time. The floors are covered with linoleum. A specially fitted operating theater has been provided on one of the barges with a hoist for lowering the patients, thus avoiding any unnecessary jolting. The hospital barges are connected by telephone with the staff barge, which contains separate mess rooms for doctors and nurses, and cubicles for the medical and nursing staff, together with an office, bathroom and kitchen. The staff on board this water ambulance, including doctors, nurses, orderlies and cooks, numbers about sixty.

The Princess Christian Hospital Train. The Nursing Times, London, 1915, Vol. XI, No. 519.

This train, recently sent from London to France, is built and equipped so that it can, if necessary, be used as a stationary hospital on wheels. The first coach contains an office and bed for the quartermaster-sergeant, partitioned off from a ward, with accommodations for 30 patients. Numbers 2 and 3 have each 36 beds with lavatory in center and lockers in the four corners. Number 4 has beds for 12 orderlies, with two lockers and lavatory, a kitchen fully equipped, and beyond this a spacious storeroom for linen. Number 5 affords sleeping accommodation for the nurses, adjoining which are two compartments arranged for nurses' and doctors' dining rooms; next to these is the office of the principal medical officer, adjoining the surgery, followed by a sleeping room for the doctors. Numbers 6 and 7 are similar to numbers 2 and 3. Number 8 contains accommodation for 12 orderlies, a kit store and a second kitchen, chiefly intended for hot water and small cooking. There are also, at the request of the War Office, four other coaches for "sitting-up" patients. Each coach can accommodate fifty patients, and folding tables between the seats have been provided for meals.

Institution for Infants. The Canadian Nurse, 1915, Vol. XI, No. 5.

Infants should be kept in a hospital for only a short time, carefully guarded from auto- and hetero-infection while there, and finally, to insure good convalescence, sent out to recuperate under as favorable conditions as possible. The Hospital for Sick Children, Toronto, has established its Infants' Department with these ideas in view. This unit has accommodations for approximately 60 infants and is divided into small and large glass cubicles with central corridor between the cubicles. The small cubicles accommodate 2 to 3 infants, the large 4 to 5, and each cubicle has its own ventilating, heating and water system. A nurse is supplied for every two children and all the infants are attended to in their own cubicle, thus eliminating contact with infants from other cubicles. Children suffering from pneumonia, meningitis, etc., can be treated in the same ward, inasmuch as they are separated by glass cubicles, which reduce the spread of infection to a minimum. The equipment of this "infants' hospital in small units" is complete, including accommodations for two wet nurses, premature room, dressing and minor operating room and milk modifying laboratory.

Cooling Apparatus in Hospitals (Ueber Kühlanlagen in Krankenanstalten). A. Klaffke. Zeitschrift f. Krankenanst., Leipzig, 1915, XI, No. 7.

The author first gives a historical review of cooling devices in ancient and modern times. All these forms of apparatus were of a primitive order. A complete revolution in this field was brought about by the invention of ice and cooling machines. Artificial cold may be produced by the following methods: (1) By liquefying a solid body (salts). (2) By expansion, i. e., expansion of compressed gases. (3) By evaporation, i. e., by converting a volatile liquid (ether, ammonia, sulphurous acid, carbonic acid) into a gaseous form. The ammonia, sulphurous acid and carbonic acid machines are the most practical. They were at first only used in large establishments, as cold storage buildings, breweries, etc., but smaller machines are now constructed for hospitals which are very practical. The question of expense has been solved by introducing cold-accumulators in the cooling room.

The author gives a detailed description of the cooling plant in the great Elberfeld hospital. It consists essentially of (1) an evaporator, in which the cold-producing liquid (in this case liquid carbonic acid) is evaporated, (2) a condenser, in which the cold-producing liquid is condensed, and (3) the compressor, which forces the carbonic acid vapor from the evaporator (cold-accumulator) into the condenser to be liquefied. The compressor has a double action, suction and compression. It sucks the gaseous carbonic acid from the evaporator (cold-accumulator), condenses it and forces it in a gaseous form into the cooling worm of the condenser, where it is converted into the liquid form by the continuous flow of the cooling water. The liquid carbonic acid collects in the lower portion of the cooling worm and is carried to the regulation valve, which passes the liquefied carbonic acid to the pipe system of the accumulator. In the cooling worm of the accumulator the carbonic acid is evaporated and withdraws heat from the salt water. The carbonic acid is then sucked up by the compressor and condensed. In this manner the car-

bonic acid passes through an endless circle from the liquid to the gaseous state and back again; there is no waste of carbonic acid in this process. The condenser is a cylindrical tank, which contains the spiral worm. The cooling water enters below and flows off above, while the carbonic acid passes through the spiral tube from above downward. The cold-accumulator consists of a sheet-iron tank filled with salt water and containing the cooling worm. The carbonic acid entering through the regulation valve evaporates in the spiral tube of the accumulator and thereby cools the salt water. Such an apparatus is of great value in a modern hospital. The conservation of food materials and the prevention of their being spoiled will soon pay for the plant. The article is accompanied by six diagrams.

The Right to Perform Operations in Licensed Private Hospitals (Das Recht zur Vornahme von Operationen in konzessionierten Privatkrankeranstalten). Zeitschrift f. Krankenanst., Leipzig, 1915, XI, No. 9.

The Federal laws of Germany require a license for all private hospitals. A right to perform operations is not necessarily implied in such a license. If a permanent operation room is established in such an institution a special license is necessary. Some time ago it happened that an operation was performed in a sick-room of a private hospital which did not possess an operation room. The case was carried to the courts, but the latter decided in favor of the hospital, as the law is obscure on the point in question and does not mention operations in sick-rooms. The court held that in emergency cases an operation may have to be performed in a sick-room in the interest of the patient.

The Hospital Population of the Principal Cities of Italy (La popolazione ospedaliera delle principali citta italiane). Rivista ospedal., Roma, 1915, V, No. 2.

The cities whose hospital accommodation is more than 1,000 beds are Milano with 4,028, Rome with 3,274, Turin with 1,857, Genoa with 1,488, Venice with 1,483 and Florence with 1,030 beds. There are ten cities with more than 500 beds, fourteen cities have more than 300 beds, and six cities have more than 200 beds. Copenhagen is at the head of all European cities with regard to the number of beds as compared with the number of inhabitants. The capital of Denmark has one bed for every 106 inhabitants. Then follow Rome with one bed for every 129, Hamburg with one bed for every 140, Paris for every 180, Berlin for every 201 and Vienna for every 247 inhabitants.

Preventive Measures Against the Importation and Spread of Typhus Fever (Massregeln zur Verhütung einer Einschleppung und Verbreitung des Flackfiebers). Zeitschr. f. Krankenanst., Leipzig, 1915, XI, No. 13.

As typhus fever has broken out in the Russian army, this terrible disease does not only threaten the German armies in the east, but there is also danger that it may be imported into Germany through the numerous Russian prisoners. To obviate such a calamity the Minister of the Interior has published rules and regulations for the prevention of typhus fever. Typhus fever patients and persons suspected of having the disease are to be isolated in special hospitals. As the disease is transmitted through lice all patients and persons suspected of having the disease must at once be freed from this vermin. This can be done by exposing the clothing to live steam or to sulphurous acid vapors. The head of the patient is to be shorn closely and treated with gray ointment. Physicians and nurses in typhus fever hospitals must protect themselves against infection by wearing rubber shoes and rubber gloves. It is recommended that they tie their garments closely around the wrists and ankles to prevent the penetration of disease-carrying vermin.

Experiments in Vermin Destruction (Versuche zur Vertilgung von Ungeziefer). Dr. E. Wiener. Wien klin. Wochenschr., 1915, XXVIII, No. 4.

In trying to cleanse 28,000 Russian prisoners, who were infested with lice to an enormous degree, it was found that the lice kept alive under water for hours at a temperature of from 70 to 80° C. In a bichloride solution (1:1000) they kept alive for 40 minutes. Sulphur dioxide and formaldehyde vapors were also tried without success. The only successful method was streaming steam, which killed the vermin at a temperature of 102-103° C. The clothing of the men was tied in separate bundles, numbered and cleansed in Thursfield steam disinfectors. The men took a half-hour bath in a large basin filled with a warm bichloride solution (1:1000) and immediately entered their new barracks, where they were handed new underclothing and their bundle of clothes.

Cooking Apparatus (Kochanlagen). E. Mattheus. Gesundh.-Ingenieur, München, 1915, XXXVII, No. 13.

In former times it was practically impossible to cook large quantities of food for a great number of people satisfactorily. But a change took place by the introduction, toward the end of the last century, of the so-called water-bath cauldron, which consists of two Papin pots built into each other. The food is cooked equally, without stirring, and almost without any supervision. Burning of the food is impossible. The inner cauldron is usually made of iron, or, if possible, of pure nickel. Cooking by steam heat with a steam tension of .3 to .5 atmospheres is now most widely practiced. In hospital kitchens tubings should be hidden from view for esthetic as well as for hygienic reasons. The steam-conducting pipes should be placed in cellars or in accessible spaces under the kitchen floor. As a third method of heating may be mentioned gas heat in hospitals where steam heat is not available. The cauldron for gas heat is constructed similarly to that for steam heat and may be fitted out with or without the water-bath.

Dispensaries for Smaller Hospitals—Why We Need Them. Michael M. Davis, Jr., Director of the Boston Dispensary. The Trained Nurse and Hospital Review, 1915, LIV, No. 6.

Every hospital should exist for the benefit of the community, and yet the superintendent is justified in considering the immediate interests of his or her particular hospital, and asking the question, "What will an out-patient department do for the hospital itself?" Mr. Davis answers this question with the statement that "The dispensary feeds, follows up and forestalls the hospital—it feeds the wards; it follows up discharged patients, preventing recurrence of disease and promoting hospital efficiency; it forestalls serious disease by treating it in early stages, promoting economy of hospital service."

Experience has taught the director of the Boston dispensary that adequate service cannot be maintained for less than 25 cents per visit—this unit of cost being obtained by dividing the total expense of the out-patient department by the whole number of visits paid by all patients. Although an out-patient department can neither be run for nothing nor next to nothing, appeals for funds receive response because the obvious relief of suffering given to large numbers makes such appeals both concrete and strong. Briefly, Mr. Davis is convinced that a dispen-

sary, well managed and intelligently and persistently kept before the public, should prove an asset, not a burden, upon the hospital which maintains it.

Heating and Ventilation of Military Hospitals, Barracks and Similar Establishments by Fresh-Air Ventilation and Heating (Heizung und Lüftung von Lazaretten, Baracken, und dergleichen durch Frischluft-Ventilationsheizung). F. H. Heilanstalt, Leipzig, 1915, X, No. 3.

On account of the great war buildings of various kinds have to be converted into hospitals. In such cases heating and ventilation is always a great problem. The modern hot-air heating system seems to be the most suited for such establishments, as it accomplishes at the same time both purposes, heating as well as ventilation. The source of heat is a special modern hot-air furnace with smooth vertical heating surfaces. The fresh air is obtained from the outside and is first conducted to a dust deposit chamber. Then the air is carried by suction to the space between mantle and oven of an ordinary hot-air furnace. At the top of this furnace is a hot-air collector from which the warm air is carried through stove pipes to the various rooms. The entrance opening in the room is provided with a regulating apparatus, while the exit of the consumed air is similarly regulated.

Should the Function of Antitubercular Dispensaries be Merely Prophylactic or Also Curative (La funzione dei dispensari antitubercolari, dev' essere solo profilatica o anche curativa)? Dr. Ronzoni. Tubercolosi, Milano, 1915, VII, No. 7.

Discussing this question before the Health Association of Milan, the author holds that an antitubercular dispensary should be essentially an institution of prevention. Therapeutic measures belong to special hospitals and should not form a part of the dispensary work. The dispensary is a medico-social institution for the protection of the individual and of society against tuberculosis. Its work consists in detecting tuberculous persons and especially incipient cases, in studying the spread of tuberculosis in a given center and the laws governing it, in forming an individual and collective antitubercular conscience among the people, in drawing up tuberculosis statistics and in promoting the knowledge among the people concerning the means of preventing tuberculosis especially as regards isolation, hospitalization and protection of childhood. For the treatment of tuberculosis the author recommends special institutions intimately connected with the dispensary.

The New Office of Sanitary Statistics of the Hospitals of Milan (Il nuovo ufficio di statistica sanitaria degli istituti ospitalieri di Milano). Dr. E. Ronzani. Ospedale Maggiore, Milano, 1915, III, No. 2.

At a meeting of the hospital superintendents held at Rome in 1911 it was found that in Italy only the hospitals of Rome, Genoa and Parma published sanitary statistics. The hospitals of Milan had so far kept only incomplete records of the sick movement, which were of little practical value. An office has now been established to collect statistical data in all the city hospitals. The office uses the classification of diseases adopted by the Italian hospital superintendents in 1912 (providing for 14 groups and 320 diseases). The same form is used in all hospitals. This form is divided into two parts. The first part is filled out at the entrance of the patient and contains name, age, trade, residence and date of entrance. The second part contains the ward in which the patient was treated, the disease with the corresponding number of the classification table, results of the treatment and number of days the patient stayed at the hospital. When the patient leaves the hospital his record is sent to the statistical office, where the data thus furnished by all the hospitals are worked up in general statistical tables.

Hospital Efficiency From the Standpoint of a Hospital Surgeon. R. L. Dickinson. Boston Medical and Surgical Journal, CLXXII, No. 21.

The status of the intern is referred to as chaotic; the consultants, we are told, do not consult, and many trustees are accused of "taking it out in trusting." Lack of time, lack of organization, lack of instruction, lack of inspection and lack of publicity are stated to be the five inefficiencies for which, fortunately, remedies are proposed. Many of the factors tending toward standardization that are now being worked out receive attention and an excellent form of detailed report on efficiency of each member of the professional staff is submitted. A central board on standards, experiment stations, a library and a museum of standards are suggested as the four requirements necessary to cover adequately the subject of the efficiency of the hospital and its professional work.

The Relation of Alcohol to Accidents. William J. Brickley. Boston Medical and Surgical Journal, CLXXIII, No. 20.

The Haymarket Relief Station of Boston treats about 40,000 patients annually, coming from the emergencies arising in three general groups—the industrial, the transportation and the residential. Dr. Brickley, the resident surgeon of this hospital, states that 40.6 percent of the adults who died there from accidents during the past four years were distinctly alcoholic at the time of the injury. The following conclusions the doctor bases on his experience at the Haymarket Relief Station:

1. Alcohol causes accidents.
2. Alcohol obscures diagnosis.
3. Alcohol increases the danger of infection at the time of the accident.
4. Alcohol prevents adequate treatment.
5. Alcohol increases the danger of intercurrent complications.
6. Alcohol retards the process of repair.
7. Alcohol gives a poorer end result.
8. Alcohol increases the mortality in accidents.

Alcoholism and Insanity (Alkoholismus und Irrsinn). Phychiat.-neurol. Wochenschr., Halle a. S., 1915-16, XVI, No. 49.

To what extent alcoholism is a causative factor in insanity is shown in the latest report of the Commission for the Insane of the city of Berlin. Of 449 epileptics admitted to the Wuhlgarten hospital 316 were alcoholics, of 25 patients suffering from hysteria 14 were alcoholics and of 31 hystero-epileptics 21 were drunkards. During the fiscal year 1914, 3,201 persons were admitted to the hospitals for the insane at Dalldorf, Herzberge, Buch and Wuhlgarten; of this number 479 patients suffered from chronic alcoholism.

Enterprise in American Hospital Management—The Hutchinson Museum and Its Lessons. The Hospital, London, 1915, LVIII, No. 1507.

Noting with regret that the clinical museum established by the late Sir Jonathan Hutchinson is to be lost to England by its transference to the Johns Hopkins Hospital, our confrère assures us that though keenly conscious of a sense of loss, he bears us no grudge and could not wish it a more worthy home than "the great post-graduation school of the United States."

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DEPARTMENT OF NURSING

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Urine Analysis for Nurses

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THE URINE IN DISEASE

In conditions of disease the urine is one of the most important keys to diagnosis. Its examination is essential and often in cases where there seems to be not the slightest relation to the genito-urinary tract we may find the kidneys at fault. This is particularly true in all cases of coma, for there are two kinds of coma which are due directly to involvement of the kidneys, viz., diabetic coma and uremia. In diabetic coma the urine usually gives a strong positive sugar test, and always we find acetone and diacetic acid. In uremia the urine contains large traces of albumin. These specimens often must be catheter specimens.

Amount in Disease. Increased amounts of urine may be passed in the following cases:

1. Some forms of nephritis.
2. Diabetes, 400—10,000 cc.—20 pints.
3. In some diseases of the nervous system, as hysteria and convulsions.
4. There is often a temporary polyuria due to mental excitement.
5. Some drinks, as beer, wine, tea and coffee, increase the quantity of urine more than the amount of water they represent.

Decreased amounts of urine may be passed in the following cases:

1. Fevers, when much water is lost through perspiration and through the lungs.
2. Acute nephritis.
3. Retention in the bladder, due to stricture, calculi or hypertrophied prostate.

Color in Disease. Color varies according to the degree of concentration, ranging from straw yellow, reddish brown to brown black. Patients with jaundice have a dark urine, which, when tested with a few drops of tincture of iodine, show a characteristic greenish bile ring.

Blood in the urine, such as we usually find in acute nephritis, stains it brownish red.

Fever urines are usually dark, or high colored, as we call it, owing to concentration.

Drugs may color the urine. Santonin colors the urine yellow or greenish yellow, with a yellow foam. Carbolic acid and tar preparations cause a greenish or greenish-black color.

Urine that is turbid when passed is generally pathological. This is true in nephritis because of the formation of organic constituents, and in all diseases of the urinary passages, especially in severe cystitis. Blood and pus mixed make the urine turbid. The rarest kind of turbidity is that caused by fat in the urine, viz., chyluria.

Specific Gravity in Disease. The specific gravity in disease varies from 1.000 to 1.060. It is always high in diabetes. A high specific gravity with a clear, abundant urine points to diabetes mellitus.

Reaction in Disease. A neutral or alkaline urine is met with in sickness under the same conditions that make it neutral or alkaline in health.

1. Due to admixture of blood and pus.
2. Due to alkaline fermentation in the bladder, as in cystitis.

Odor. In acetone we get a fruity odor, and in cystitis an odor of ammonia.

GLYCOSURIA

The presence of glucose in urine is no more synonymous with diabetes than the presence of albumin is with Bright's disease; but diabetes is the condition which most commonly causes glycosuria. Diabetes is now assumed to be a disease of metabolism which prevents the conversion of the carbohydrates into their simpler elements. The anatomic site of the lesion is usually the pancreas. Several other causes may produce glycosuria.

1. *Alimentary Glycosuria:* due to an excess of carbohydrate in the food, notably excess of candy or sugar.

2. *Medicinal Glycosuria:* due to drugs, as chloroform, amyl nitrate, inhalation of illuminating gas.

3. *Secondary Glycosuria:* accompanies cirrhosis of the liver, head injuries, apoplexy, paresis. It may occur during pregnancy and in the course of acute infectious diseases.

Always suspect sugar in urine if the specific gravity is high, especially if it be normal in color and abundant.

Test for Sugar: Fehlings. This is the copper test, most commonly used. It depends on the power of glucose to reduce copper oxide in an alkaline solution.

Equal parts of a solution of copper sulphate and alkaline solution of sodium potassium tartrate are mixed in a test tube. Take about 5 cc. of each, heat to a boiling point, then add, drop by drop, some of the suspected specimen. The presence of sugar is characterized by a yellow or a brick-dust precipitation. The mixture should not be boiled after the addition of the urine, as this induces the reduction of copper by other substances than sugar.

ACETONE AND DIACETIC ACID

These are two pathological products found in urine, due to an acid intoxication and the breaking up of acetic acid, in cases of:

1. Starvation.
2. Febrile acetonuria.
3. Diabetic acetonuria.
4. Certain forms of cancer.
5. Mental diseases.
6. Derangements of digestion.
7. Chloroform narcosis.
8. Auto-intoxication.

Indican is found in cases of proteid decomposition in the intestines.

ALBUMIN—ALBUMINURIA

The most common proteid in the urine in disease is serum albumin, although pathologic conditions of the kidneys, blood, etc., may give rise to other forms of proteid. By albuminuria we usually mean the presence of serum albumin in the urine.

A healthy kidney may excrete a certain amount of albumin, but not every urine contains albumin. It is generally admitted, however, that serum albumin and serum

globulin may occur in small quantities in the urine without any changes in the kidney.

Albuminuria may be due to one of three factors:

1. Changes in the kidney which affect the excretory epithelium.

2. Changes in the blood which render its serum albumin more diffusible.

3. Changes in blood pressure.

Serum albumin in noticeable amounts is never found in healthy urine and its presence is always an important clinical symptom.

TESTS

Heat Test. This depends on the fact that heat coagulates albumin as it does the white of egg. Heat a test tube two-thirds full of acid urine over a flame. If albumin is present a flocculent precipitate results. Next, add one-fifth volume of a saturated solution of sodium chloride and a few drops of 2 percent acetic acid, then heat. If the haze remains it is serum albumin, as nucleo-albumin and phosphates are soluble in the presence of sodium chloride.

Nitric Acid Test. This is the best and simplest. Take two parts of urine and one part of nitric acid. Slowly underlay the urine with the nitric acid. If albumin is present it will appear as a white zone at the junction of the acid and the urine. The width of the zone determines the amount of albumin present.

Slightest possible trace (S. P. T.) just visible against black background.

Very slight trace (V. S. T.) can be seen with background, but not looking down on surface.

Slight trace (S. T.). A distinct zone of white which can be seen without a background and from above.

Trace (T.). More distinct.

A brown ring often appears, due to the action of the nitric acid on the coloring pigments. A white zone is also formed by the action of nitric acid on the mixed urates, if these are in excess. This zone of acid urates is found over the zone of contact between the acid and the urine. It diffuses rapidly and can be dissipated on the cautious application of heat. Do not confuse this zone with albumin. It always lies above the junction of the urine and the nitric acid, and above the zone of coloring matter.

To Nurses, at Graduation—Make Not Only a Living, but a Life

The methods and principles of a certain great manufactory have been much heralded throughout our country. It is the purpose of the establishment to promote and advance the worthy and efficient workers as far as such knowledge of them comes to the heads of departments.

Contrary to the usual procedure, a worker must be worthy as well as efficient. A visitor, being much impressed, inquired concerning this, was told that the firm believe that their men should not only make a living, but should make for themselves a *life* and that it was useless to encourage those who could not do so.

No reason was given the visitor for this, but it is at once apparent that the value of a life and its results are summed up in character; and character is largely made by the manner of doing ordinary tasks in addition to the reason for doing them.

The life you have chosen is one of service and the truest nobility is honest, earnest service, and the ideal of service is faithfulness or work done according to a high standard set up by the worker himself.

You know we have often discussed the fact that not all are endowed with equal ability; but you have it within your power to see that no one excels you in faithfulness and industry, which, after all, are the most splendid gifts.

The hospital days are in the past and you have given your service to it with a degree of faithfulness known best to yourselves. You know, also, whence came your greatest happiness—whether from the perfected task or in that which, mayhap, you partially evaded.

Whether you so reason it, you have learned that to accept your work as part of your duty and to cultivate it as a habit, is to safeguard your lives from many a mistake and error.

Ability to continue to toil is now what you must cultivate and you must find your compensation in an increased ability.

The work which has no other than a money value cannot bring the satisfaction the worker craves. If you put love for others into it, you take grossness out of it.

If you put love and efficiency into it and if you carry it on with patience and energy you prove yourselves worthy of promotion, worthy the honor of receiving harder and larger tasks, and you do give adequate response to your high calling.

High Ideals in Nursing[1]

BY ALICE H. FLASH,
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This is not the place in which to indulge in familiar generalities about the ideal nurse—what she is or is not—but rather to discuss how we, real, practical people, in the most real and practical of callings, may employ the imperfect facilities at our command to bring out of the crucible of the training school a nurse who has ideals, even though she may not be one. When, with honor, dignity, and enthusiasm, we have trained her to use her hands, taught her to use her head, and inspired her to use her heart, we will have accomplished our purpose.

We have made a tremendous start on the road of standardized nursing education, but the goal is still far and, at present, the education and technical training of nurses must, to a great extent, be governed by existing local conditions. As ambitious and progressive nurses, we must stand for the highest and best, but, as superintendents, we must sometimes compromise with circumstances in the training of head and hand. But the training of hearts is strictly our own domain where we are hampered only by our own shortcomings. Here is the soul of the training school.

And so, if in this paper I speak little of the educational and technical equipment of the ideal nurse, it is not that I hold these things less high, but that experience has taught me that it is in the less standardized side of a nurse's training, which, for lack of a better term, we call the ethical side, that we seem most in need of counsel. We must learn to train the woman in the nurse. It is a significant commentary on existing methods that graduate nurses are rarely criticized for lack of skill, but almost always for lack of tact.

We cannot control all the elements that go into the character of an ideal nurse, but we may, if we face our responsibilities vigorously, influence them. We must first make it our business as individuals to attract to the training school educated women of good home traditions. It has seemed sometimes that, perhaps, some of us have put an exaggerated emphasis on this much discussed

[1]Paper read in the Conference of the American Hospital Association, San Francisco, June 25, 1915.

requisite of education—that a knowledge of the Latin conjugations is not a vital requirement for doing a surgical dressing. In all the discussions, we have, perhaps, lost sight a little of the fact that it is not merely what education *is* that we need, but what it *implies;* home training, parental ambitions, greater stability of purpose, more settled standards of conduct. To us, therefore, the high school diploma is more than a guarantee of a certain amount of book knowledge—it is a symbol, a symbol of the American home from which comes the woman we want for a nurse. It is an imperfect measure, of course, but, at present, it seems to be the only one practically available.

In drawing to our schools a desirable type of candidate, we should study the methods of an efficient salesman. He takes his goods to market and, if no market exists, creates one. We have not sought intelligently the sources of ideal supply for our schools, nor have we made any particular attempt to stimulate them. We have taken what has come along, have done the best we could with it, and have blamed our failures on the quality of the raw material.

The time now is ripe for vigorous action. Educated women everywhere are looking about them for an active means of self-expression such as is offered by our profession with its noble traditions and practical possibilities. We must seek out these women and make our profession known to them. We have agreed that the American colleges offer a practical and fertile source of material to the training schools, but our agreement has not functioned extensively in vigorous individual action. Discussions on how to train college women are less valuable to us at the present time than workable suggestions on how to get them.

In various states, notably in the west, superintendents of training schools have given so-called vocational addresses before the girls of the different state colleges. It is astonishing how little they knew about us, and more astonishing still, that in view of the direct results attained, more of us have not tried to apply the ideas and methods of these progressive women.

Miss Parsons, of the Massachusetts General Hospital, offers an illuminating experience and example. She has addressed the students of all the women's colleges of Massachusetts, setting forth the opportunities of the training as a preparation for life, and of nursing as a practical career for an ambitious woman. She has educated the colleges on the subject of the nursing profession. A majority of the nurses in her school today are college women, and Miss Parsons is not over-sanguine when she foresees the day when college training will be a requirement of entrance.

The enthusiasm and eagerness felt by a candidate when she is accepted are too precious not to be utilized. This is the time for the future nurse to imbibe our traditions and our ideals. She should be given a definite list of books to read; a life of Florence Nightingale, a life of Clara Barton, a history of nursing, a history of the Red Cross. She should be directed to review fractions and percentage and ordinary high school anatomy and physiology, but, under all circumstances, she should be required to provide herself with copies of the standard nursing periodicals, from which she will gain, more than from any other source, a sense of the bigness and broadness and the strong vitality of the profession as evidenced by its organizations and their varied fields of usefulness and aspiration.

It is impossible to over-emphasize the importance of early impressions on the probationers. They have such good intentions, these girls, vague, of course, and sentimental, and a little absurd sometimes, but, to us, as teachers of hearts, infinitely valuable. Ours is the task to preserve their enthusiasm through the trying probation period, to keep alight the flame of altruistic spirit, to glorify hard and disillusioning work.

Hard work, so-called menial work, is our first big difficulty. It is hard to make institutional housework the expression of high ideals. Quite properly there is coming to be less and less of this in the training, but—also properly—it still has its place in the routine. We make it clear to the probationer that she, as a nurse, will always be responsible for every detail of her patient's surroundings affecting his mental as well as physical comfort, and that such detail must be a part of hospital routine if she, as a graduate, would recognize and deal with it as part of duty.

By making the cleaning of a bathroom the first lesson in thoroughness, we instil the lesson that there is but one standard of work; neatness must be neatness, cleanliness must be cleanliness. Cleaning the bathroom may at first seem menial, but we show that it is really a test of character, of that sense of responsibility for homely detail that indicates capacity for critical emergency. A maid can put a ward in perfect order, we point out, but we expect a nurse to do more than that. She must leave behind her not only physical order, but spiritual calm. This is the measure of nursing efficiency, the difference between menial work and nursing.

You must not misunderstand me when I say that we do not believe very much in the formal teaching of ethics to probationers. Lectures on nursing ideals never made an ideal nurse. Ours is a profession of practice and its every act must be an expression of its ethical standard, its every duty an application of its ideals.

We must of necessity have a talk or two on hospital etiquette, but they should be human and reasonable, stating, not bare rules, but the simple underlying causes that make necessary certain principles of organization and management. Do not depict hospital discipline as a blind, relentless monster, but as a just and balanced system evolved from long experience and founded on the peculiar exigencies of hospital conditions.

Yours is the responsibility whether the young nurse regards the hospital authorities as enemies to be circumvented or as friendly co-workers for a common cause.

During the probation, a woman must prove herself to us as a woman, must prove her personal no less than her mental and technical fitness to uphold the honor of the hospital and of the profession. We have no rules in the nurses' hall. We have the traditions of all good American homes, and we expect in the nurses the standard of conduct of all well-bred women. The training school is not a school of deportment, and a woman who comes to the age of entrance without having acquired a sense of fitness in manners and in conduct has no place with us. It does not seem to me that the probationer who tucks her napkin in her collar will make the kind of nurse we want to send out into the world, nor does it seem to me that it is my function to instruct her in this matter.

We do not believe in a great deal of comment on conduct during probation. We believe that our standards should be made clear, our spirit demonstrated by example. But only by letting the probationer show in her own way what is in her of discrimination, taste, and common sense can we judge of her fundamental fitness for the nursing profession. But we hold toward her always an open mind, giving her every opportunity for observation and adapta-

tion, and, in the final judgment, we give her every credit for such powers of perception as she may have shown. As soon as we have permitted her to put on the cap of our hospital, the responsibility is ours and ours alone.

The student nurse, if we would join in her fair-mindedness and honor, must understand from the beginning that her relation with the hospital is a perfectly dignified, well-balanced business arrangement whereby she gives three years of service in return for technical training that lifts her forever from the ranks of unskilled labor. The contract is without obligation on either side except for its conscientious fulfilment. The responsibility for this rests on the superintendent of nurses, who must maintain always the balance between students with rights to be considered, and workers whose services may be commanded. On the maintenance of this balance rests the whole structure of our training schools.

There are many details of the hospital's obligation to the student nurses that admit of no argument; obligations that must be scrupulously discharged if the hospital would exact its own obligation of earnest inspirited service. We are all agreed that the nurses should have a definite curriculum, a high quality of instruction, living conditions that measure up to a high standard, but agreement as a body will do nothing without vigorous action as individuals. Our ideals must truly be expressed in works. If you have not a tabulated record of actual hours of theoretical and practical work to compare with the statements of your curriculum, if you are requiring your nurses to spend their off-duty time in attending classes, and requiring them to sit through badly prepared lectures either over or under their intelligence, if you are expecting a proper standard of conduct without providing a proper standard of living, you are failing in your duty, and failing in the courage, the firmness and the persistence that you are here to inspire. The self-administered assurance that existing conditions are the best you can do will not exonerate you.

As we give high ideals of justice in order to inspire them, so must we ourselves give enthusiastic and sympathetic service if we would receive it. When a nurse's work begins to lose tone, when her technic threatens to become perfunctory habit, and her interest in the day's work to become blunted by routine, do not think you can give her back her inspiration by lecturing her on professional ideals. A little personal pressure will accomplish more toward enlivening her spirit than all the high-sounding phrases you can muster. Go often to her ward, watch her at her work, drop in a word of praise here, a casual comment there—with *your* sympathy stimulate the failing springs of *her* sympathy.

Hospitals make exacting demands on the women in their service, but it is not fair to a student nurse to make her, during her training, an alien to all the interests of life outside the walls. Indeed, we must not do so if we would have our nurses well rounded women capable of meeting the myriad exigencies of their professional lives. The hospital life, the actual physical weariness at the end of the day's work, precludes our going out into the world to meet its interests. But there is no reason why we should not permit them to come in to us.

We touch here on the difficulty of the superintendent coming in contact with the nurses in her personal capacity. It is neither desirable nor possible for the superintendent to be "one of the girls" at night in the home, and still maintain the fine edge of dignity when on duty in the hospital. The usefulness of the head nurses in creating in the home an atmosphere to nurture and develop the woman in the nurse is handicapped by the same conditions. A house mother, a woman of lofty standards and elastic expressions capable of stimulating a simple and wholesome social and intellectual life seems the ideal solution. But, for the present, she is only for our large, well-endowed schools. The rest of us must exert ourselves in directing our available facilities to the best advantage.

In the home itself, in the group spirit of the nurses, we have an immense unused energy that invites careful study and direction. Perhaps I had better say here that neither experience nor experiment has justified any belief that the principles of student self-government could or should be applied to any angle of the training school that touches even remotely on the hospital and its requirements. But, in the idea is an ideal that is worthy of study and of adaptation to certain phases of the life in the home. Such suggestions as are here made are based on that ideal and are put forward only as general ideas to be formulated and developed according to specific requirements.

Class spirit has been little utilized by us except in maintaining the rule of seniority, but it may be made to serve not only as a proper means of self-expression to the student body, but as a means of relieving the superintendent of a considerable amount of detail. Each class should be represented on a house committee of three, the members chosen as may seem expedient. Through this committee the student body approaches the superintendent with its ideas and suggestions on all matters, not of discipline, but of social life. Through this committee the superintendent advances her own projects of a similar nature, giving latitude in detail and execution, both of which are entrusted to the house committee and its numerous self-appointed sub-committees.

Let this committee be responsible for the management of informal talks on current events given at regular intervals by local club women always willing to demonstrate their altruistic spirit. Turn over to it the care and energetic development of a periodical library including the best daily newspapers and the standard nursing journals.

Let this committee or its aides serve tea one afternoon a week in the nurses' sitting room, where they may drop in in their kimonos or in uniform as they come and go from duty.

Let each class give an annual tea to the other classes, this to be given in the parlors, and each member of the hostess class having the privilege of inviting a friend or two outside the hospital.

Let each class have an annual lecture during the winter, the subject chosen from a list submitted by the superintendent. A variety of timely and stimulating subjects on which volunteer lecturers may be secured suggest themselves:

Nursing in foreign missions;
Settlement house work in the large cities;
Infant welfare work;
The Red Cross.

The superintendent herself may give a tea in her rooms once a year to each class. Have an assistant, a graduate nurse, with interesting experiences to talk about. In every way, from your best gown to your warmest spirit of hospitality, give the little party the atmosphere of a private home and not of an institution. But remember that compulsory pleasures are a sad business, and every one of these things will fail of its purpose the moment it becomes even remotely obligatory. In the measure that anything of this kind is not yours, but the nurses' social expression, will it prove valuable to you as a means of softening routine and of instilling a knowledge and appreciation of social amenities.

At first thought, it would seem that in the troublesome matter of discipline in the training school there could be no ideals—only dire necessity. But there is discipline and discipline—a discipline of expediency that makes its object sullen and resentful, and a discipline of thoughtfulness that stimulates the latent or flagging sense of responsibility. Until we have cast out the former and achieved the latter, we have something to work for. Suspension, as the most available instrument in the hands of a superintendent, has, unfortunately, been used with more frequency than intelligence. Although the suspended nurse may recognize the justice of your judgment, she rarely, on her return, falls wholly back into the step and spirit of her work. Indefinite suspension has advantages over definite, for thereby the offending nurse may be put on her mettle to show by her attitude and her conduct that she is worthy to resume her responsibilities. But even indefinite suspension should only be used for extreme cases of deliberate neglect of patients; even then it is a poor expedient, and to find a practical substitute for it is something to be thought about.

For thoughtlessness or for single acts that might be accidents, it is hard to find a satisfactory measure. The ideal discipline in such cases is a punishment that fits the crime, that causes the nurse to make amends for what she has done. When a nurse's error has caused trouble to a patient, she may properly be required to special him on her own time, giving him all possible attention until every vestige of her mistake has cleared up.

Not long ago, on a busy day at the out-patient department, a nurse burned a woman's arm with carbolic. An instant's confusion of bottles and the damage was done. She was a good nurse, but this could not pass. For two weeks she was required to employ her daily hours off duty in visiting the patient, dressing her burn, caring for her and helping her. The nurse learned a lesson in human sympathy and self-denial, the patient had her faltering faith in trained nurses restored, and no one felt any resentment.

The most difficult cases we have to deal with are, after all, the inevitable breaches of decorum that occur in the best of homes, and which must be met if we would preserve their tone. But cannot many of these things be approached with a certain restraint and with a saving suspicion of humor? I have never forgotten the suppressed laughter that convulsed the training school when in my student days, a superintendent made a dramatic scene at prayers with a beer bottle she had found under the windows of the home. I always wondered why she didn't leave it there.

A superintendent will always find that hasty, unintelligent punishments visited on the grown women in her charge will react on her own influence. If she would make her own influence stand for justice, she must not permit tale-bearing, nor act on any suspicion that comes to her from any source whatever until she personally has investigated. No nurse should be condemned until she has been heard "in her own behalf." Then, since these are schools of nursing, and not of manners and morals, the judgment may properly be referred to the offender's parents or to those responsible for her deficient standard.

A nurse in a isolated ward admitted that she had chatted with an intern for an hour at midnight. She also admitted that she had not been brought up to entertain men in her home at that hour after her parents had retired. Then and there her father, a doctor in a nearby suburb, was notified of her breach of conduct and, at his request, she went home the next day on her hours. I do not know what happened at home, but I do know that that nurse has never since shown the faintest interest in interns.

The whole vexed question of the relation of doctors and nurses rests largely on the character and conduct of the superintendent. More in this than in any other phase of life in the training school is her example all-powerful. A superintendent and her staff who have for themselves anything less than the highest womanly standard of personal and professional dignity, prove themselves unworthy of the high trust of their positions.

Perhaps I have spoken more of ideas and methods than of ideals, but we all know that ideals without works do not last very long in the business of nursing. If we feel that ideals are one thing more to be added to a crowded curriculum, we will never attain them, but, if we make our ideals the vital spark of our nursing consciousness, they will become the guiding light for our every problem. Let us approach the problems of our training schools with ideals that express themselves in active, energetic efforts to better conditions. Only by so doing may we inspire in our nurses the enthusiasm, the honor and the resourcefulness that are their ideal equipment.

Rules for Giving Medicine

A few good rules to be remembered in giving medicine are:

Always give exactly what the doctor orders; neither more nor less. Always give medicine on time.

Medicines intended to be taken before meals should be given 20 minutes before meal time, those to be taken after eating, 20 minutes after the meal is finished.

Never give medicine without reading the label twice. When pouring medicine always hold label side up and avoid defacing.

Do not use spoons for measuring, for they are never accurate. Small graduated glasses, which are better, can be bought at any drug store for about 10 cents.

Always shake bottle before using.

Bottle should be recorked immediately, as some medicines become stronger and some weaker if left uncorked.

Medicines containing iron should be taken through a glass tube or straw, as they discolor the teeth.

The "ministering angel" point of view is imaginary; there is no more self-sacrifice in a hospital than out of it. The nurses are not pale-faced, pious, and overworked, but a merry set of hard working women, who eat, sleep, and enjoy with zest any pleasure that comes in their way.

MISS ISLA STEWART.

The Chestnut Hill Hospital, Philadelphia, recently received $52,000 as a bequest from the late Chauncey S. Brush of that city. Out of the same estate $10,000 each was paid to St. Christopher's Hospital for Children, Germantown Dispensary and Hospital, Howard Hospital, Philadelphia Polyclinic Hospital, Pennsylvania Hospital for Sick and Injured, and the Hospital of the Protestant Episcopal Church of Philadelphia, and $12,000 to the Women's Southern Hospital.

A national bureau of rural sanitation has been established at the U. S. Marine Hospital in St. Louis, with Dr. Allen W. Freeman, epidemiologist of the United States Public Health Service, in charge. From this station Dr. Freeman will direct educational work in rural sanitation over the entire United States. Twenty-five men will assist Dr. Freeman. They will visit the rural districts in every section of the country, speaking in town halls, school houses, and other places, and calling at the homes of farmers, telling the people how to care for their health and prevent disease. The states to be visited first are Minnesota, Iowa, Kansas and Missouri. This work was started at Washington last year on a small scale, but covered only a few of the eastern states.

PREVENTION OF BLINDNESS
MATERNITY

Conducted by CAROLYN CONANT VAN BLARCOM, R. N.,
Secretary National Committee for the Prevention of Blindness;
Chairman Committee on Infant Welfare, National
Organization for Public Health Nursing.

Trachoma in the Mountains of Kentucky

BY DR. J. A. STUCKY, Lexington, Ky.

[Note—From no part of the country do we hear of more devoted, untiring and unselfish effort to save human beings from blindness than from the mountains of Kentucky. Whatever is attempted or accomplished there is in the face of almost unsurmountable obstacles, but the task is undertaken with a fearlessness and courage that are an inspiration to other workers whose efforts are facilitated by highly developed medical and relief agencies within their call. Even the railroads are lacking in many parts of Kentucky where patients must be reached and saved from blindness, and great stretches of nearly impassable mountain country are covered by those devoted sight-savers in wagons or on horseback. They literally carry their hospitals with them from place to place, improvising operating rooms and clinics from the meager equipment which they can carry, and work with untiring and unflagging spirit to preserve the daylight for many who would otherwise live in endless night.

The names of Miss Linda Neville and Dr. J. A. Stucky, who sends the following communication, are written in letters of light on the page of history describing the battle with trachoma in this country. The difficult trail blazed by them is now being followed by others in other states. The United States Public Health Service has recently secured an appropriation from the Government which will make possible the establishment of two trachoma hospitals in the southern mountains—one in Virginia and one in West Virginia. In the employ of each hospital will be a nurse devoted solely to follow-up work and the education of the people in their homes concerning the care of trachoma and methods of prevention.—Carolyn C. Van Blarcom.]

Fig. 1. Trachoma clinic held at Oneida, Ky.

Replying to your request to write a short article for publication in this department of THE MODERN HOSPITAL, on Trachoma in the Mountains of Eastern Kentucky, I have only to say that the most marked differences in the status of this disease as I have found it among the natives of the mountains are:

1. A large percentage of them have the disease, and the vision of many of them is permanently impaired by it.

2. This people (the natives) are genuine Americans, the last of the real Anglo-Saxons, who have been held back by the rapid advance of civilization because they have never had a square deal or a fair chance, having few and inferior schools, no roads and no community life. Their viaducts are aqueducts. It is almost unthinkable as well unbelievable that of this splendid people scarcely one in ten of the adults can read or write. The disease exists in its most serious form and in largest number among the adult population. The counties having most of the disease are pauper counties, with not so much as an almshouse where the afflicted can be cared for.

3. If the disease is to be eradicated and new cases prevented, among the chief factors in bringing about this result must be the influence and ministrations of the graduate trained nurse. In dealing with this splendid simple folk no man can do what woman can do, and the eradication of the disease will be the result of the combined efforts of the medical man, the trained nurse and the school teacher.

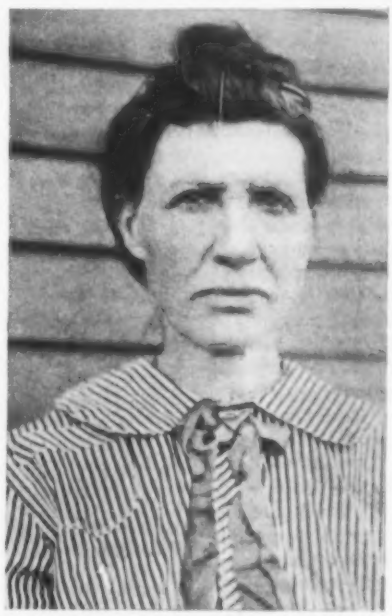


Fig. 2. Blind from trachoma for nineteen years. After six weeks' treatment in the hospital, which included double canthoplastic, double iridectomy, the patient has enough vision to attend to all of her domestic duties, including sewing and knitting.

No field for missionary service known to me offers as important and interesting a service for humanity, which can be accomplished more effectually by woman than by man, than this one among the natives in the heart of the mountains of Kentucky. Into the cabin homes on the mountain-side must be carried, by woman, to the mothers and homekeepers, the knowledge of how to live and be healthy and happy with what they have, where they are. In the mountains of eastern Kentucky is an ideal field for service for the educated, consecrated trained nurse who desires to live the larger professional life which she believes to be her vocation. It is with great pleasure and pride that I give to the good women, trained nurses—most of whom I have helped to train, and who have accompanied me for the past seven years in my semi-annual clinics—unstinted credit and appreciation for the work accomplished. Without the trained nurse not one-fourth of

the good that has been could have been accomplished. These women have not only rendered invaluable aid in scientific treatment of the disease among women and children, but have rendered a service in leading them from the bondage of illiteracy and ignorance regarding sanitary living in a way that no man could have done.

Unfortunately the specific cause of trachoma has not been found. This is a reproach to ophthalmology and it

Fig. 3. Wagon load of nurses homeward bound from a trachoma clinic in the mountains of Kentucky.

is to be regretted that a greater effort is not being made to isolate the specific germ producing the disease. The natives of the mountains know nothing of contagion and infection and very few or them know anything of the first principles of hygienic living. Undoubtedly the chief disseminator of the disease is the family towel, and when the natives are taught the necessity of doing away with this, as well as the necessity of clean living, sanitary cooking and correct eating, the disease will rapidly subside. I am convinced that trachoma is not actively infectious, and that only in the acute inflammatory stage where there is a copious discharge is it liable to be communicated. The graduate nurse should be taught how to care for the eyes and how to carry out the treatment prescribed by the oculist. I am convinced that half a dozen well trained nurses who will do district work in the mountains among the natives will accomplish more good in the eradication of this disease and in teaching the people how to live than twice this number of medical men. The average woman in the mountains, living remote from the railroad, is at least one or two centuries behind the times. She not only bears the heavier burdens of the race in childbirth, usually rearing a large family, but she does the major part of the work in the heat of the day on the hillside in raising the crop upon which this family is to subsist. It has been said that "far-away hills look green," and this is true perhaps in the majority of cases, but in the Appalachian range of mountains are avenues of work for the medical missionary never dreamed of by the average American.

Fig. 4. Typical mountain cabin. All of the family have trachoma.

Be it said to the credit of the natives of the mountains that in addition to having a high grade of natural intellect, they are loyal, honest and highly religious—their religion being of the emotional type. What these genuine Anglo-Saxons and true Americans need is the example and help of true and trained womanhood, because it is by the women and children of the mountains that most of this infectious, destructive disease of the eye, and all other infectious diseases, is to be eradicated. Were the whole truth told of how these natives live and where they live it would sound like fiction; laurels and living monuments are waiting for those who believe that "charity begins at home" and that we *are* our brothers' and sisters' keepers. Here in the heart of civilization, within less than one hundred miles of Lexington, Kentucky, long known as the Athens of the West, exists a condition of affairs that should bring the blush of shame to the cheeks of those blessed with worldly goods and a knowledge of how to live. From the permanently impaired vision and the aching, trusting hearts of these genuine Americans, our neighbors and friends, comes the voiceless but soul-deep Macedonian cry, "Come over and help us."

The Georgia Association of Graduate Nurses, in annual convention at Savannah, May 14, authorized the appointment of a committee to draft a bill designed to require compulsory registration of nurses and stricter requirements in admissions, and otherwise to raise the standard of the profession in Georgia.

Fig. 5. En route to the clinic. The only roads are the creek beds.

Finally approved plans for the proposed new home of the Utica (N. Y.) Homeopathic Hospital call for two three-story buildings, one 41x109 and the other 42x68. The construction will be semi-fireproof. Brick and stucco are specified for the exterior. The partitions will be of brick and gypsum. Hard plaster will be used on the walls. The roofs will be of slag. The estimated cost of the two structures is $110,000. Agne, Rushmer & Jennison, of Utica, are the architects.

DEPARTMENT OF LIFE EXTENSION

Conducted by EUGENE L. FISK, M. D.
Director of Hygiene, Life Extension Institute, Inc.
25 West Forty-Fifth Street, New York City.

Keep Your Faith in Fresh Air

Scientific research and experiments are fast uprooting the very foundation on which we formerly based our theories regarding ventilation and fresh-air supply. We no longer value fresh air alone because of the oxygen or ozone that it conveys to the lungs. We hesitate to condemn foul air because of its carbon-dioxide or alleged organic impurities cast off by the lungs. Ozone in sufficient quantity to kill a microbe will prove absolutely harmful to an animal—it now receives little attention from hygienists. It may be stated that under no ordinary living conditions is the supply of oxygen so deficient, or the supply of carbon-dioxide sufficiently great to affect appreciably the condition of the blood. The real value of deep breathing seems not to be in bringing more oxygen to the lungs, but rather in its mechanical effect on the circulation. Air supply today constitutes a problem in physics rather more than in chemistry—a problem in which the skin plays a greater role than the lungs.

Kortkoff, a Russian investigator in this field, recently reported that rabbits kept in closed boxes for two months maintained fully as good blood conditions as those kept in the open air.

Men, surrounded by fresh air of normal humidity, have breathed vitiated air through tubes with apparent impunity—nevertheless, all such experiments only emphasize the enormous value of proper ventilation and the necessity of adequate utilization of fresh-air supply in our homes, work shops, offices and institutions. Results of the present intensive efforts to arrive at a solution of this problem do not shake our faith in fresh air—the last word is yet to be spoken—but our present knowledge justifies us in concluding that:

1. Baleful influences of so-called "foul air" are chiefly due to—
   - a. Presence of dust or deleterious chemical substances.
   - b Unvaried air temperature—unfavorable to good skin training.
   - c. Odors—oppressive and heavy, tending to mental depression.
   - d. Lack of air movement—unfavorable to normal evaporation and heat loss because it does not stimulate the circulation of the skin.
   - e. Excessive heat and dryness—deleterious to mucous membranes of nose and throat, even in rooms that are not crowded; and excessive heat and humidity in crowded rooms, preventing a normal evaporation and heat loss from the skin through radiation. (The ill effect of extreme dryness is still a matter of debate and has not been settled experimentally as have the other factors.)
2. Fresh air is most beneficial in its effects when—
   - a. Freed from dust or deleterious chemical substances.
   - b. Varied in temperature.
   - c. Without oppressive and heavy odors.
   - d. Moving over surface of body.
   - e. At temperature not above 70° F. and humidity of 60 percent.

The Life Extension Institute recently found an elevation of temperature constant in a group of people examined, accompanied in some cases by a slight skin rash. Investigation proved the group were working in rooms filled with stagnant, overheated air. A window-board, placed on the sill at an angle to deflect the air coming in from the slightly opened window upward toward the breathing zone, easily corrected the condition and the symptoms disappeared.

Special ventilating devices should be more extensively utilized to remove dust and deleterious chemical fumes in factories. Temperature should be varied at least twice a day by opening wide all windows. Electric fans are more essential in winter than in summer, when open windows are the rule, because most interiors, during the cold weather, are overheated and the air not only becomes too humid, but stagnant.

Remember that man today is not the outdoor animal of long-past ages with nerve centers constantly stimulated by the wealth of influence of earth, sea and sky. He now not only lives in houses, but is still further shut out from the atmosphere by clothing. Paper vests, chamois jackets and fur clothing should be resorted to only as a temporary protection under extreme conditions. Porous clothing will effectively protect you from drafts and colds if the skin is kept in training through cold water and air bathing. A normal skin and circulatory poise is a possibility to all save the feeble and anemic. Sleep out of doors if you can, but remember that there is no merit in cold feet or a frozen nose. Have no fear of the "night air"—all air at night is "night air"—but see that you oil or drain the breeding places of the mosquito, lest he soon fly in at your window.

"The System" in Hospitals

We quote the following from a most excellent article on "The Trials and Triumphs of the Surgeon," by J. Chalmers Da Costa, M. D., LL. D., that appeared in a recent number of the *New York Medical Journal:*

"In some hospitals there is a certain evil tendency. Now it slumbers; now it turns uneasily in sleep, dreaming of power; now it wakes to harmful deeds. Now it fastens upon an institution as the Old Man of the Sea fastened upon the neck of Sinbad the Sailor. That evil tendency may be called 'the system.' All of you who have read of the murder of Rosenthal, the gambler, know what the system was in the New York police force. The system in a hospital is the same sort of thing to a less degree. It means that certain medical men improperly and unjustly acquire supreme power and use that power for selfish interests and not for the public welfare. In an institution in which the system is in full sway, some of the staff get more than they deserve and most less than they need. Those who speak the truth are regarded with fear and aversion. Abuses accumulate. Ignorant neglect is tolerated in some, the best effort is censured in others. There is an outward appearance of the highest efficiency, when in reality the institution is a whited sepulchre. No man is appointed to the staff purely for fitness, but personal reasons sway the result. On one side we see the suffering poor, on the other the foul and loathsome rule of the system. Everything is passed to the man higher up. If I had my way I'd strike that thrice accursed system dead."

Miss Clare Baker, formerly head nurse at the Watertown (Ill.) State Hospital, is walking from Watertown to Seattle, Wash. Miss Baker expects to be accompanied part of the way by her sister, whose home is in Rock Island.

SOCIAL HYGIENE
VENEREAL DISEASES

Conducted by WILLIAM F. SNOW, M. D.,
General Secretary, The American Social Hygiene Association,
105 West Fortieth Street, New York City.

What Shall We Read?

There is a constant and growing demand for short reading lists of books on social hygiene subjects from individuals and from organizations such as women's clubs, study circles, libraries, and the like. This demand is evidenced by the prize competition resulting from it, conducted by the American Social Hygiene Association and noticed in THE MODERN HOSPITAL for May, 1915. One of the difficulties in selecting such a list is found in the conflicting views of author and reader upon unsettled questions. For example, an author may write an excellent series of chapters on the changes of adolescence, presenting forcefully the need for continence prior to marriage, and follow these with chapters advocating sex relations within marriage only for procreation, or summarizing the arguments in favor of birth control and recommending their approval. The book is condemned by those readers who disagree with the author's views on sex relations within marriage. Some books have been opposed as unwisely stressing medical questions or the white slave traffic, others as minimizing the moral and religious factors, still others as being superficial or so poorly written in parts that the book as a whole must be disapproved.

With the purpose of stimulating the selection of effective methods of presenting facts and points of view rather than the selection of books in their entirety, a series of chapters from the thirteen books listed below has been chosen for illustration. The exact titles of the chapters have been quoted and the presentation of subject-matter under each title is as nearly a direct quotation as the combination of selected sentences permits. This list is presented for discussion as a beginners' course for groups of readers whose time is limited and who desire constructive information on social hygiene.

Exclusive of the reference books specified by the last three numbers, the chapters illustrated by these abstracts would make somewhat less than three hundred pages of the popular novel size. A novel, or an interesting book of science, history or travel, of three-hundred-page length does not deter even the busy man or woman from selecting it for reading. The cost of the thirteen books is less than fifteen dollars. This is more than one man or woman ordinarily desires to invest in reading matter on this subject, but for the shelves of a nurses' training school or hospital library, or a community reading-group this amount is not large.

The thirteen books considered, arranged alphabetically by author, are as follows:

What Men Live By.....Richard C. Cabot
Engagement and Marriage.....Orrin G. Cocks
The Social Disease and How to Fight It..Louise Creighton
Rational Sex Life for Men.....M. J. Exner
Prostitution in Europe.....Abraham Flexner
The Social Emergency.....William T. Foster
Biology of Sex.....T. W. Galloway
The Kallikak Family.....H. H. Goddard
For Girls and the Mothers of Girls.....Mary G. Hood
Heredity of Richard Roe.....David Starr Jordan
Teaching Sex Hygiene in the Public Schools.....Edith B. Lowry
Wild Oats.....James Oppenheim
Boyhood and Lawlessness, and The Neglected Girl.....Ruth True, Pauline Goldmark, and others

I. SAMPLE PARAGRAPHS FROM ELEVEN OF THE BOOKS

1. *The Social Emergency*, Foster; one chapter, 7 pages.

The breaking of the conspiracy of science concerning matters of sex and reproduction constitutes a social emergency fraught with immediate dangers which must be met, and the home, the church, and the school must be prepared to accept their full responsibilities in the teaching of sexual hygiene and morals.

2. *Various Phases of the Question*, Foster; one chapter, 12 pages.

The question is not merely one of physiology, or pathology, or disease, or wages, or industrial education, or recreation, or knowledge, or commercial organization, or legal regulation, or lust, or social customs, or cultivation of the will power, or religion. It is all of this and more. The danger is that we shall see only one or two sides of a many-sided problem.

3. *The Gate of Gifts, Inheritance of Humanity*, Jordan; two subtitles, 8 pages.

When a child is born, or long before that, at the moment of the blending of the two germ cells, the gate of gifts is closed to him. Henceforth he must expect nothing new and must devote himself to the development of the heritage he has received from his father and his mother. In this he has a lifelong task.

4. *Nature and Nurture*, Jordan; a group of subtitles, 14 pages.

One of the perennial questions in the study of man is that of the relative value of the original endowment as compared with the acquisitions of environment, training, and experience. Nurture has only Nature to build upon. With adequate nurture each man becomes what it is in him to become. The character of a nation is determined by the character of the people living in it. The purpose of the study of eugenics is to know the kind of ancestors we should pick for the next generation.

5. *The Call to Face Facts*, Creighton; one chapter, 6 pages.

The matters under consideration are of vital importance to the whole life of the nation. Therefore the way in which they are treated must also be of vital importance, and this especially in consideration of their peculiarly difficult character. The first need is for knowledge; but as everyone cannot know everything at once, selection is needed. Not only who shall know, but how much each should know is important.

6. *The Evil to Be Fought, the Only Real Cure for This Evil*, Creighton; two chapters, 21 pages.

It is, of course, impossible to fight these diseases as if they stood alone. They are part of a bigger evil, of the low moral tone in society generally, and the consequent prevalence of a different moral standard for men and women. It is this which has led to the existence of the chief means for spreading these diseases, the prostitute.

7. *Wild Oats*, Oppenheim; last three chapters, 30 pages.

A story with a message concerning the consequences of venereal diseases.

8. *The Kallikak Family,* Goddard; last chapter, 17 pages.

A scientific story with a message. A young man of good family, living in a New England colony prior to the Revolution, in an unguarded moment steps aside from the paths of rectitude and with the help of a feeble-minded girl, starts a line of mental defectives that is truly appalling. After this mistake, he returns to the traditions of his family, marries a woman of his own quality, and through her establishes a line of descendants equal to that of his ancestors. The record of the defective line shows forty-one matings in which both parents were feeble-minded and which have produced two hundred and twenty-two feeble-minded children.

9. *A Well-directed Childhood; the Girl, the Boy;* Lowry, three chapters, 33 pages.

Upon the training a child receives during the early years of his life, upon the ideals engendered, depends, to a large extent, the entire course of his after life. This does not mean that he is to be neglected in later years, but a boy or girl who has been rightly trained up to the age of twelve or fourteen very seldom will go far astray.

10. *Actual Conditions, Guiding Principles in Sex Instruction,* Galloway; two chapters, 20 pages.

The problem of sex, as it bears on human education, conduct, and welfare, is one of the most practical and important that we are called upon to solve. It must be understood at the very beginning that sex and all that it implies is a perfectly natural, normal fact of life, with nothing unholy or perverse about it.

11. *The Problems of Parents,* Galloway; appendix, 15 pages.

The purpose of this appendix is to deal somewhat concretely with certain of the more common problems which parents should help their children to meet. These questions, especially the early ones, will usually come out of a clear sky. It is the part of wisdom, therefore, for the parent to be prepared beforehand.

12. *The Significance of Sex, Physiology,* Exner; two chapters, 25 pages.

There can be no real satisfaction in sexual relations divorced from genuine marital love. I say marital love, for sex relations outside of wedlock involve responsibilities which no man or woman has the right to assume. Not only is the seeker after illegitimate sex pleasure denied that which he seeks, but he is visited with the most terrible retributions—the loss of the capacity for love.

13. *The Young Man's Problem,* Exner; one chapter, 28 pages.

From the beginning of puberty up into old age every normal man will from time to time experience sexual desire. This is natural; it is fundamentally necessary and therefore entirely honorable. It simply indicates that he is a man. The teaching of those who seem to assume that any manifestation of the sexual instinct or the experiencing of sexual desire is itself a sin or a cause for self-reproach and shame, is false and pernicious. The important question is, what should be the young man's attitude towards these natural impulses?

14. *To Mothers and Teachers of Girls, Concerning Marriage,* Hood; introduction and two chapters, 14 pages.

All boys and girls should eventually gain the appropriate knowledge under some sort of instruction. The parent cannot evade or shirk the responsibility. If the home has been negligent and failed to fulfil its trust, then, as in other matters of education, the interests of the community are involved and some other agency must provide suitable instruction for the rising generation of men and women.

15. *The Reproductive Organs, Menstruation,* Hood; two chapters, 10 pages.

The physical and mental changes belonging to the age of puberty are strongly marked. Before this time the girl may have been told by her mother that still another physical change is near. The meaning of menstruation should be explained to her and the reasons made plain why the girl should keep well and give proper attention to the hygiene of the menstrual period.

16. *Engagement and Marriage,* Cocks; fourteen questions, 48 pages.

Marriage is a most holy estate and is to be entered into "reverently, discreetly, advisedly, soberly, and in the fear of God." For this reason all the factors involved in successful marriage should be understood by the man and the woman.

17. *The Allies of Love. Love's House of Many Mansions,* Cabot; two chapters, 14 pages.

It seems hardly decent to discuss so sacred a matter in the publicity of print. Dimly aware of this, we try to approach the subject delicately through such phases as *The Spirit of Youth* (Jane Addams) or *The Life Force* (G. Bernard Shaw, in *Man and Superman*). To free the word "love" from its association with boudoirs and morbid novels, we try to identify it with something genial and all-pervasive, to ally it with the great, sane forces of nature. We must learn to think of personal love not so much as a single quality or impulse, but as a house of many rooms. Each room represents some type of affection—conjugal, paternal, filial, or friendly.

II. THREE STUDIES WORTH STUDYING; COMBINED IN TWO VOLUMES

18. *Boyhood and Lawlessness,* 199 pages.

The influence of environment on character is now so fully recognized that no study of juvenile offenders would be complete without a consideration of their background. The pages descriptive of this study of boyhood and lawlessness in a section of New York City are replete with specific information and suggestions which are in a large measure applicable to boyhood and lawlessness throughout the nation.

19. *The Neglected Girl,* True; 134 pages.

"You've got t' keep your eye on a girl. Now, it's different with a boy. He can take care of himself. But you never can tell, if you don't keep a watch, when a girl's goin' to come back an' bring disgrace on you." Such in a nutshell is the attitude of our community toward the adolescent girl. Like its companion study, this one presents facts and observations of great value to all students of social and moral conditions of our people.

20. *Prostitution: Definition and Extent, Regulation and Disease, Abolition and Disease,* Flexner; complete book, 452 pages.

It is difficult to summarize the contents of the volume. It touches many different aspects of the problem—the nature of modern prostitution, the factors determining demand, the sources of supply, the various methods used in its regulation or control, their operation and value, the effect of abolishing regulation, and the general outcome of European experience. Though Dr. Flexner has in no way taken America into consideration, without question the facts he has assembled will be highly pertinent to any discussion in this country as to the merits of proposed legislation; for his account makes it clear that widespread misapprehension prevails as to the policies pursued by European cities, and their results.

PHILANTHROPY AND THE PUBLIC HEALTH

THE NEW YORK ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR.
BAILEY B. BURRITT, General Director.
WILLIAM H. MATTHEWS, Director,
Department of Family Welfare.
DONALD B. ARMSTRONG, M. D., Director,
Department of Social Welfare.

Preventive Nursing—An Educational Bureau

BY HOLLAND HUDSON.

What preventive medicine is to surgery and medicotherapy, preventive nursing is to hospital nursing practice. It is the stitch in time that may save nine cases in ten from already crowded hospitals and almshouses. Preventive medicine is well personified in the medical examiner, a registered physician peculiarly skilled in the detection of those minor physical defects which are the gateways of disease. Preventive nursing is similarly personified in the social service nurse, a hospital-trained specialist peculiarly skilled in bringing to the medical examiner from the many persons in her care those who need his services, and in seeing his advice carried out until her services are superfluous.

Preventive nursing is the common ground of modern medicine and modern philanthropy. Few modern hospitals (except those treating a special class of patients), recognizing how many patients are diseased because they are impoverished, are now without a social service department. Few modern philanthropic organizations, recognizing that more than half of their applicants are dependent because of sickness, are without a large and growing staff of nurses.

It is the task of the Bureau of Educational Nursing of the New York Association for Improving the Condition of the Poor to pilot back to health one-half of the families whose destitution also receives material relief. In addition to this, hundreds of families who need only a nurse's services to prevent destitution are cared for by the bureau. Altogether, it is a task which few hospital superintendents would envy, but it is pursued both by the bureau superintendent, Miss Le Lacheur, and the entire staff of nurses with a clear-headed enthusiasm and thoroughness which makes the bureau a more potent social agent with each month of its experience.

A specific illustration of the bureau's work is contained in the following characteristic day from a nurse's work:

Arrived on district, ready for first call, at 8:45 A. M.

First Call. Instructions to pregnant woman; referred her to Bellevue School of Midwifery. Examined the children who were at home.

Second Call. Family returned from Caroline Rest[1] one week ago; referred baby to milk station and arranged to have two younger children examined for tonsils and adenoids.

Third Call. New case; woman pregnant and not well. Referred her to New York Dispensary for medical attention. Boy of seven anemic; child of three years very bad case of rickets; child of five badly burned—cared for by Henry street nurse. Mother willing to follow any instructions.

Fourth Call. Found baby of six months quite ill. She was afraid to take baby out. Made baby comfortable.

Fifth Call. Asked doctor from New York Dispensary to call—ordered milk. Later, baby found to have pneumonia.

Sixth Call. Took four children to New York Dispensary Tuberculosis clinic for examination and got report. Mother was not able to take them.

In office at 11 A. M. for dictation of previous day's work, reading new cases and day's mail, dictation of letters, consultation with visitors and supervisor. Referred baby in third call and two other children to Convalescent Home. Telephoned Bellevue School Service regarding family in which both are mutually interested. Telephoned Babies' Welfare Association and arranged for admission of rachitic child (third call) to Laura Franklin Hospital. Answered several telephone calls and interviewed woman in application room. Ordered milk for baby referred to Milk Station. Read over cases dictated on day before.

Left office at 12:30 for luncheon. On district, 1:15 P. M. Took baby to Laura Franklin Hospital (mother was a janitress, unable to leave). Met two women at office and took them to School of Midwifery for examination. Went to Bellevue Dispensary; met nine patients—three for children's clinic, one for gynecological clinic and five for medical clinic. Spoke to doctors about them and got reports. Looked up information about three old cases and visited two patients in the wards. Arranged with Social Service Department to send one of the latter to the country.

Returned to office; made out list of cases for next day.

This shows thorough cooperation with five medical and two relief agencies. It is characteristic of preventive nursing by any organization.

In two particulars the Bureau of Educational Nursing is attempting to reach the ultimate standard of preventive nurses. First, it recognizes that every hospital graduate is not naturally equipped for such work. Just as the work of the medical examiner calls for more than a technical proficiency in the use of speculum and stethoscope, the preventive nurse's work calls for more than a glib familiarity with hospital routine. She must have the medical examiner's sharp eye for physical and mental defects; she must possess infinite tact and tireless pertinacity; she must be capable of prompt and shrewd decisions and able to persuade, or even command, as well as to obey.

On such a personnel the bureau depends for its field efficiency on dynamic and not static minds. The administration is similarly dynamic. The type of record used by any nursing staff of ten years ago would not be tolerated today. Year by year and month by month, the bureau has adopted from the modern hospital and the modern business administration new means of efficient record, rejecting the cumbersome and retaining what experience proves valuable. Without sacrificing field efficiency to statistical proficiency, the bureau has found that a complete system of records is both a barometer and an accelerator of that much-desired efficiency. Today the bureau can give by the telephone, without delay, any essential fact in any case history requested by some other agency of medical or material relief. There is no mystery about how any nurse's time is spent, or why any case was terminated. Such information is immediately accessible in simple and concise form.

A gift of eight and a half acres of ground and several buildings near Llanerch, Pa., has been made to the Babies' Hospital of Philadelphia by a friend whose identity has not been disclosed. The property is being altered to care for the hundreds of babies of the poor up to three years old, suffering from summer complaint and other acute diseases.

Dr. Jos. T. Buxton, of Newport News, Va., has awarded a contract for the erection of a private hospital to cost $15,000.

[1] A postnatal convalescent home and school for mothers maintained in Westchester county by the N. Y. A. I. C. P.

DISPENSARY AND OUT-PATIENT WORK

Conducted by MICHAEL M. DAVIS, Jr.,
Director of the Boston Dispensary.

A New Field for Out-patient Work

A new field for out-patient work is developing in connection with mental diseases, as shown by the following extract from *The Survey* of May 15, 1915. The development of this special out-patient service connected with the hospitals for the insane, and in psychopathic hospitals for the study and disposition of cases of mental disease and defect, will undoubtedly lead also to the extension of special clinics for mental diseases in the out-patient departments of the large general hospitals.

With the rapid development of out-patient activity in the Massachusetts Hospital for the Insane, a new era seems at hand. For many years a complaint has been heard that the doctor saw the mental case too late to do any good. In spite of new legislation and attempts to maintain high hospital standards at our institutions, the fact has remained that most of our patients have been sent to state hospitals as a last resort and so have received expert advice after their disease had advanced to such a point that forceful confinement was necessary.

Though the average hospital physician has recognized that state care really meant more than the custody of incurables, the average layman has been inclined to overlook the fact that prevention and treatment were the first interests of such physicians. On January 1, 1913, an out-patient department was opened at the Psychopathic Hospital in Boston. Complete in every detail, with elaborate provision for social service work, this department serves as a model for out-patient organization.

At last the social service idea had reached the insane hospital. Not content with having Boston alone provided with such an opportunity for early diagnosis and after-care, the Massachusetts Board of Insanity asked in August, 1914, that each hospital under its supervision consider opening an out-patient department. This request met with a ready response, and one by one the hospitals have announced new clinics, until now, only a few months since, nearly every hospital has undertaken some form of out-patient work and ten have opened clinics in more than twenty different cities and towns.

A year ago advice could be had at great expense only by few except those in Boston. A patient had to be committed as insane to get proper treatment, except the few who could be persuaded to go to hospitals as voluntary patients. When discharged from a hospital no more was known of the patient until a relapse brought him back to the hospital again. The hospital doctor, even though his motives were of the best and his action the most altruistic, was looked upon as one a little apart from the rest of the medical profession and perhaps akin to the jailer.

Now all this is to be changed. Nearly every large city in the state has a clinic. Some are monthly, some weekly, and one is daily. Every effort is made to make them reach patients early, such as notifying practicing physicians of the date of each clinic and putting a short notice in local papers. Especially are former hospital patients urged to report from time to time that a relapse may be forestalled.

Social service is being added, and relations between doctor and patient are becoming more intimate and less official. Also the doctor of the insane hospital is taking his rightful place among practitioners—that is, he is being looked up to as a specialist, rather than down upon as a custodian.

Another wholesome feature is the cooperation between different hospitals in this work, a thing of which there has been altogether too little in the past. Each hospital is becoming the center for conserving the mental health of its neighborhood rather than a gloomy place where "crazy" people were confined, a place always looked at with mystery and suspicion.

These clinics are being well received; patients are using them in increasing numbers and doctors are not only sending patients for consultation but are going themselves to consult about patients under their care and to inquire for those whom they have sent to the hospital.

Thus it seems that a breach is being closed. The barrier between patients needing advice and the doctors anxious to give it is being broken down, and the insane are being considered as sick friends, not as outcasts.

Fact and Fiction About "Dispensary Abuse"

There is still a great deal of talk about "dispensary abuse." A superintendent writes: "Doctors oppose a dispensary because they say they lose patients; the dispensary takes patients though they can pay; they flock to a dispensary and cheat the profession."

The physician of one prominent organization located in Philadelphia took a group of 200 patients to study carefully. On first examination it was judged that 7 percent were questionable cases, and 93 percent were undoubtedly unable to pay for the physician. When, however, on further investigation by skilled workers, the 7 percent were more carefully studied, it was found that more than one-half of them were suitable cases and were not abusing the privileges of the dispensary. They were, for the time being at least, unable to pay a physician. It has been charged by some that dispensary abuse is particularly rife in Philadelphia. The above report from the medical clinic of the Dispensary of the University of Pennsylvania may, therefore, be of especial interest to some members of the profession in Philadelphia.

A report recently received from the Dispensary of Rhode Island Hospital showed that in the course of a year a trained social worker had taken charge of the admission desk and had questioned all applicants for treatment. The proportion of cases who were deemed able to pay for a physician was 3½ percent.

If two ounces of fact are not worth several bushels of statement, the above dose of facts at least suggests that every institution might well make similar studies. The investigations made by a committee on out-patient work of the American Hospital Association, reported in the proceedings of the association for 1913, and a study made in 1911 by the County Medical Society of New York City, all tend in the same direction as above.

It is easy to get excited over scattered cases of imposture. Is it not better first to find out whether such cases are large or small proportion before admitting that any rise of temperature is justified?

LETTERS FROM OUR FIELD EDITORS

News From the Pennsylvania Field

STANDARD LAYETTES FOR INFANTS

The Child Federation of Philadelphia has carefully selected as to quality, type of garment, and price, three grades of layettes, which will be known as No. 1, sold at $5; No. 2, sold at $6.50; No. 3, sold at $20. These outfits are designed by physicians and nurses connected with the Child Federation and will be for sale in all the department stores of the city. Incidentally, the mothers will be saved from foolish expenditure of money for extravagant and improper garments for the babies.

BEQUESTS

The late Josephine Borie bequeathed $2,000 each to the Free Home for Consumptives and St. Vincent's Home. Among other public charitable bequests was that of M. J. Power, who bequeathed $5,000 to St. Joseph's Hospital, $1,000 to St. Vincent's Maternity Hospital, and $500 each to St. Mary's and St. Agnes's Hospitals. The American Oncologic Hospital received a bequest of $5,000 from the late Ada R. Kimball.

The trustees of the estate of the late Chauncey H. Brush, in compliance with the instructions of the testator, divided his estate among the following institutions: Chestnut Hill Hospital, $52,000; St. Christopher's Hospital for Children, $10,000; Germantown Hospital, $10,000; Polyclinic Hospital of Philadelphia, $10,000; College for Graduates in Medicine, $10,000; Pennsylvania Hospital, $10,000; Episcopal Hospital, $10,000; Women's Southern Hospital of Philadelphia, $12,000.

The will of the late Emma N. Paul included among other contingent bequests $5,000 to the Hahnemann Hospital and $2,000 for the Home of Crippled Children.

OPTOMETRY BILL

In a statesmanlike message Governor Brumbaugh, of Pennsylvania, vetoed the optometry bill, which was designed to regulate the practice of optometrists in Pennsylvania by creating a new examining board to license optometrists. In the words of the Governor, "There is no convincing reason why these practitioners should not voluntarily place themselves under the existing licensing body of the Commonwealth. Unless a commanding reason is manifest, no additional examining boards for professional regulation should be created. The standards of professional service in this Commonwealth are and have been high. We are a center of professional services of the most commendable standards."

ANTI-VACCINATION ACT

The proposed bill, made to curtail the activities of health officers with respect to vaccination, was overwhelmingly defeated by the Pennsylvania legislature.

WIDE-OPEN HOSPITAL BILL

A bill providing that any and all medical practitioners shall have absolutely equal access for their patients to ward as well as other bed facilities in hospitals receiving state aid has not yet been acted on. The same holds true as to compensating physicians for vital statistics reports.

NURSES CONTRACT TYPHOID FEVER

As a result of an epidemic of typhoid fever in the Homeopathic Children's Hospital, two nurses died and two other young women contracted the disease. The health authorities are striving to trace the epidemic.

THE BABIES' HOSPITAL OF PHILADELPHIA

This hospital, which has occupied the Country Branch property of the Children's Hospital of Philadelphia for the last three years, declined an offer of the Children's Hospital to manage the Babies' Hospital and the latter has opened its own plant near Llanerch, Delaware county. The building is an old country mansion and is being altered so that it can be used for the care of the babies taken from the congested districts of the city during the summer.

STATE APPROPRIATIONS TO PRIVATE HOSPITALS

Bills carrying appropriations for the following hospitals of Philadelphia are on their way through the legislature at the present time: Stomach Diseases, $10,000; Jewish, $50,000; St. Luke's, $35,000; Gynecean, $30,000; St. Joseph's, $68,000; Oncologic, $25,000; Kensington, $25,000; Orthopedic, $42,500; West Philadelphia for Women, $14,000; Women's Medical College, $45,000; Germantown, $15,000; Woman's, $57,000; Children's Homeopathic, $55,000; Jefferson Medical College, $200,000; Rush, $34,000; St. Mary's, $42,000; West Philadelphia Homeopathic, $17,000; Stetson, $6,000; Douglas, $25,000; Polyclinic, $70,000; Lying-in Charity, $22,000; Mercy, $11,000; Women's Southern Homeopathic, $17,000; Howard, $24,000; Maternity, $7,000; Providence, Germantown, $10,000; Garrettson, $26,000; Samaritan, $85,000; Mount Sinai, $75,000; Frankford, $55,000; Roosevelt, $14,000; Osteopathic, $5,000; Jewish Sanatorium, $24,000; Northwestern, $20,000; St. Timothy's, $35,000; Medico-Chirurgical, $158,000.

UNIVERSITY OF PENNSYLVANIA PHYSICIANS FOR PARIS

For some time past the University Hospital, under the direction of Dr. J. William White, has been arranging for the expedition of physicians to man the Paris hospitals during the months of July, August and September. The following physicians have been named to accompany Dr. White: surgeon, Dr. James P. Hutchinson; neurologist, Dr. Daniel J. McCarthy; assistant surgeons, Doctors E. B. Piper, W. E. Lee, A. E. Billings, P. M. Keating; bacteriologist, Dr. Samuel Goldschmidt; nurses, Mrs. M. E. Spry, Miss Jackson, Miss Wagner, and Miss Frazer, all of the University Hospital.

PHYSICIAN ARRESTED UNDER DRUG ACT

The first arrest for violation of the Harrison anti-narcotic law was made yesterday when Dr. Michael Susman was taken into custody by an internal revenue officer and held under $1,000 bail for further hearing by the United States Commissioner. The doctor is charged with having committed perjury in falsely swearing to the quantity of habit-forming drugs he had received and dispensed.

LAWN FETE

As a result of a lawn fete held under the direction of the social service department of the Bryn Mawr Hospital, that institution has been enriched to the extent of $8,600, and assisted by main line churches and civic associations, that institution has been enriched to the extent of $8,600.

WM. H. WALSH, M. D.

LETTERS TO THE EDITOR

What Are Dietitians For?

To the Editor of THE MODERN HOSPITAL:

Even though only a small voice among thousands, I want to be heard in saying that as a dietitian I have derived much benefit and, oh, so much pleasure from the various articles on diet which have appeared in your magazine.

Miss Graves' papers have certainly been exceptionally good; and Miss Eckman's—well, it was after my own heart; but how many years must we wait before doctors as a whole will recognize us as being of much real value to them? Down here, I am afraid the years will lengthen out into hundreds.

This is a very well equipped and well managed hospital of 90 beds. I have been here eight months—and never yet have been consulted or even asked concerning a diet by a doctor. Whose fault is it, theirs or mine? They compliment me upon pleasing the patients, but that is not adequate return—at least that is not the work one cares for who has equipped herself, at least in a small measure, to do scientific feeding. I am a graduate of the University of Illinois. Southern hospitals demand well trained women and pay high salaries—but give them, comparatively speaking, nothing to do. I certainly trust that we shall be able to read many more articles relating to diet in your splendid magazine.

Sincerely,

MISS E. HUBBARD,
Southern Highlands Infirmary, Birmingham, Ala.

One Reason for Overcrowding Free Clinics

To the Editor of THE MODERN HOSPITAL:

When medical practice comes into daily contact with the living problems of the poor one is constantly made to understand that there are many of our inherited opinions which have little to recommend them except the accepted sanctity of tradition. Ethics can be no more than an expression of courtesy and honest treatment of our fellows—yet we act as though in these were embodied something applicable only to the conduct of a superior cult. For instance, the man who is most solicitous as to the price is by all odds the man most likely to pay his bills, and he who lightly or unquestioningly incurs expense is a spendthrift or a deadbeat. He disregards the cost because he does not intend to meet the obligation. In every business transaction we commend the thrift of the man who carefully considers before he decides to become a debtor. Yet when that same man asks a physician "What will you charge?" he is supposed, in some inexplicable way to have offended the sacred traditions of the Medical Profession. He is "shopping"—he is "commercializing" a sacred art, and instead of in a perfectly self-respecting way giving a straight answer to the question, the physician, especially if he is a man of limited practice, feels that only by assuming an air of injured dignity can he bolster up his offended professionalism.

There is no good reason why a man may not at once give his price for so minor an operation as the removal of tonsils or adenoids, or of any other work not subject to troublesome complications, yet there is no one thing that more certainly leads to the very bargain hunting we deplore than this unwillingness to set an exact money value upon a proposed operation.

The time has passed when the man who works with his hands rates the superiority of the skill of the doctor above that of the master mechanic or successful business man. Subserviency to the so-called "learned profession" lost its hold when serfdom went out of date, and our reputations will rest on what we do and not on what we charge.

But the thing I mentioned is not a part of a general lofty disregard of money matters, for the same man who resents the "shopping" or bargain hunting is the one who sends to the public clinics many who would otherwise become his loyal patients. A refusal to set, in the beginning, a fixed price for his services is continually coupled with generalization as to prices which is simply appalling to those who listen. A medical man recently told me he would not touch an adenoid case for less than $75.00. I did not believe him—unfortunately the patient did.

A father near the school—six children—father getting $2.00 a day—was told by a perfectly respectable doctor that four of his brood must have their tonsils and adenoids removed. The man consulted with four different physicians, members of our medical society, and received as the least charge for the four—$50.00 a child. I know that the father was very desirous not to accept charity, but driven by the circumstances of the case, he asked admittance to the free clinic of Mercy Hospital. The case is exceptional only in the number of children.

Mercy Hospital is always overcrowded. Its physicians give free services to its large demands, and it seems most unfair to them and to the institution that Mercy should be forced to receive patients who but for an adherence to outgrown ideas would be under the care of their own family physicians. The very large proportion of sober working men prefer to pay for services rendered, and they would do so gladly and self-respectingly if only the price set were measured by their circumstances, and if at first they knew exactly what that price were to be. Going from physician to physician is not "shopping" in any reprehensible sense. It is simply an honest effort to make small incomes cover large demands, and until specialists recognize and sympathize with such conditions hospitals like the Mercy will be forced into giving free services where such help should not be necessary.

KATHERINE B. RICHARDSON, M. D.,
Mercy Hospital, Kansas City, Mo.

HOSPITAL GETS $2,000,000 ESTATE

Barnard Skin and Cancer Institution of St. Louis Inherits Fortune of Founder

The will of the late George D. Barnard, of St. Louis, president of the firm of George D. Barnard & Co., blank book and stationery manufacturers, disposes of the bulk of an estate of $2,000,000 to charitable purposes. The chief beneficiary is the Barnard Free Skin and Cancer Hospital, of St. Louis, which was founded by Mr. Barnard ten years ago. The hospital is to receive the income from the residue of the estate after minor bequests to relatives, employees and other charities have been fulfilled. The provision for the hospital is contingent upon the name remaining unchanged, and not more than $5,000 a year can be used in research work. The Memorial Home and the Home for the Friendless, both of St. Louis, are to receive $2,000 each annually, and the St. Louis Provident Association $1,000 annually. To the Home for Aged People, in New Bedford, Mass., where Mr. Barnard lived as a boy, $3,600 annually is bequeathed. Two hundred and fifty dollars a year is to be expended in buying tickets to concerts of the St. Louis Symphony Society for pupils at the Missouri School for the Blind.

QUERIES AND ANSWERS

Inclines in the Hospital

To the Editor of THE MODERN HOSPITAL:

We are going to build a two-story and basement wing for surgical cases. The other part of the hospital is four stories high and basement, and we use an elevator. Our architect wants to do without an elevator in the new wing and use an incline instead. Will this prove satisfactory? The wing is too far from the main hospital, and the arrangement is not right, to allow us to run a bridge over between the second story of the wing and the second story of the main building. Will the incline be satisfactory, and will it take the place of elevator and stairs?

A SOUTHERN HOSPITAL.

A good many hospitals are substituting inclines, or "ramps," as they are called, for stairs and elevators in two and three-story buildings. Doctor Corwin, Chief Surgeon of the Colorado Fuel and Iron Co., used ramps in the Minnequa Hospital in Pueblo. The inclines seem to be working well there. Many other hospitals are using them and there seems to be no complaint. Care should be taken to see that they are not too steep in order that a nurse may be able to wheel a patient in a wheel-chair or even a surgical case on the stretcher without too great an effort. An orderly is not always available. The incline, or ramp, has become quite standard in hospital architecture. It will not do for buildings of more than two stories and basement, where time and the conservation of energy are factors to be considered. A three-story building ought to have an elevator.

Home Sterilized Catgut

To the Editor of THE MODERN HOSPITAL:

We have sterilized our catgut for the operating rooms in the hospital for a number of years and we have never had an infection traceable to catgut. Our doctors are now insisting that we buy our catgut already sterilized. Is this necessary and what can we do to satisfy the doctors?

A SUPERINTENDENT.

It is very doubtful whether your statement that you have not had infections is true; you probably think it is true; you must have had infections, else why would your surgeons insist on changing a practice that has proved to be satisfactory? Your doctors know better than you do whether you have had infections, and they are in position to determine better than you can determine whether your infections were probably due to catgut. You had better give them what they want and buy your catgut already sterilized. There are three or four firms whose chief stock in trade is their reputation and they certainly know more about catgut and its preparation than hospital people do, and they have always experts at their plants performing the work, whereas you entrust your work many times to young, inexperienced nurses, who rotate from one service to the other in the institution. There are too many chances for accident, and accidents due to infected catgut are too costly. Volumes have been written about the sterilization of catgut, and there are many technical points about it that have never been written at all. You had better do what your doctors want and avoid the responsibility.

Bedside Tables

To the Editor of THE MODERN HOSPITAL:

The bedside tables in our hospital wards always look untidy, no matter how much work we do to keep them in order; they are very plain, white enameled, open all around, and have one shelf and a porcelain top. We want to keep some of the individual belongings of patients on the shelf of this table, such as brush and comb, tooth brush, shaving mug, towels, etc. What can we do about it, if anything?

A WELL-WISHER.

If you have a good tinsmith in your neighborhood he can fix the tables for you to make them an exact duplication of the latest model of ward tables, and you will be pleased with the results. Have him cut sheets of ordinary tin that tinners use, of a size in length that will fold around three sides of the table, and lap around the posts; in width of a size that will run from a point about one-half inch below the table top to about an inch or two below the shelf. He will bend these sheets so that they will fit snugly around three sides and grip the two posts at which they end; that will leave one side of the table entirely open. These sheets can be white enameled and made to look exactly like the rest of the table. The half-inch opening at the top is for ventilation. Your tinner can put in an extra shelf for you if you need one; made out of a heavier sheet metal. By keeping the open side of the table toward the wall, the untidiness of the shelf and its contents will not be seen. It is quite easy to give the table a half turn when you want to get at the contents.

Humidity in Hospital Air

To the Editor of THE MODERN HOSPITAL:

Is there any fixed amount of humidity named as desirable in the air of hospital rooms and wards? Our doctors and some of the better class of patients sometimes find fault with the air in the hospital, and talk learnedly about "relative humidity," but no one has ever suggested just what we should have or how we are to get it. Please help us if you can.

AN EAGER ONE FOR KNOWLEDGE.

This seems to be almost wholly a matter of personal comfort and the personal equation. Well people differ in their preference as to moist and dry atmosphere, and individuals differ at different times and under differing conditions. Sick people are more exacting in all their requirements because of a lowered vitality of the impairment of certain of their functional organs. For this reason no one quality of air would be best in all parts of the hospital.

Take the heart case, for instance. You will find one of these patients sometimes fighting for air and very much distressed; lower the temperature and let in a lot of vapor from the radiator valve, and immediately this patient will become comfortable, the flush will pass away from his face and he will sleep quietly. But if there is a tuberculosis, last stage, patient in this same room, who has very little lung space left for breathing purposes, you will find that as the heart patient gets better, this other will become correspondingly distressed; he needs dry air.

The fact is we know nothing whatever about air problems aside from physical results. If we sleep in a room with the windows closed we get a headache and are miserable next morning; so we sleep with them open. But there are a lot of people who seem to get along quite as well and live just as long or longer who sleep with their windows tight closed.

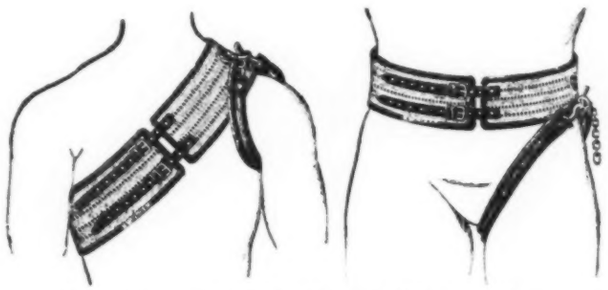
It has been pretty well demonstrated that school children have a higher efficiency in their studies, concentrate better on their work and are sustained at a higher plane of vitality at the close of the working hours if the school room is kept fairly low in temperature, say 65 degrees, with a relative humidity of about 60 percent. But the reasons advanced leave a good deal to be desired.

NEW INSTRUMENTS AND APPLIANCES

VINCENZ MUELLER, Technical Editor.
GEO. W. WALLERICH, Associate Editor.

New Devices Suitable for Hospital Practice

Since the beginning of the European war one finds rather few new inventions of surgical instruments or apparatus described in the foreign medical journals and in the surgical trade publications. Most of the new devices



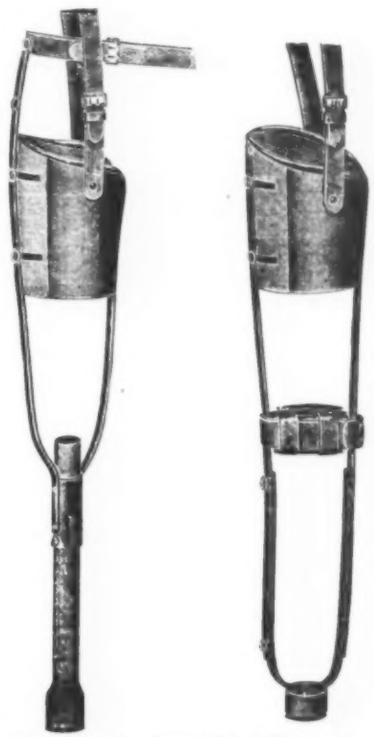
Figs. 1 and 2. Belt for shoulder and thigh amputations.

described, however, are such as are intended for the treatment of wounded soldiers; and while much of this apparatus is intended for temporary use only, there are a few devices which are of such a nature that they will no doubt become popular in general hospital practice.

Fig. 3. Device for fractured lower jaw.

One of these is a strong webbing belt with buckles and straps, to which a metal hook is attached at the proper place to keep a tourniquet in place and prevent it from slipping in shoulder and thigh amputations. The illustrations (Figs. 1 and 2) fully show the construction and method of application.

Another device which, according to reports from German military hospitals, has proven very satisfactory is a splint and bandage combined (Fig. 3) to keep the fractured lower jaw in position. A flexible piece of metal is shaped to fit the chin. Rings are fastened to this for the purpose of connecting elastic straps, which in turn are fastened by means of buckles to a universally adjustable head bandage. Thus the device can be employed on any size of head, and inasmuch as the chin-splint is flexible and the whole apparatus sterilizable, it may be used over and over again on different patients. It is especially pointed out that the patients may be dressed quickly and that very little dressing material and no bandages are needed. The quantity of these items used at present by



Figs. 4 and 5. Artificial legs for temporary wear.

some of the belligerents in Europe amounts to considerable; and as a rule economy in this also is appreciated in general hospital practice.

Figs. 4 and 5 illustrate two "peg-legs" intended for temporary wear after amputation of the leg or thigh. The shafts are so arranged that they may be made to fit any sized thigh. By simply unscrewing and reversing the shaft with the outer steel bar the leg can be worn on the other side, therefore no rights or lefts are necessary. Inasmuch as the legs are also adjustable as to length, it is readily seen that these devices must be of great service in military hospitals. One would say, moreover, that a few of these peg-legs would not be out of place in a large general hospital, as the use of them would enable at least some of the patients to leave their beds sooner than otherwise, and would also prepare them for the future use of a proper artificial limb.

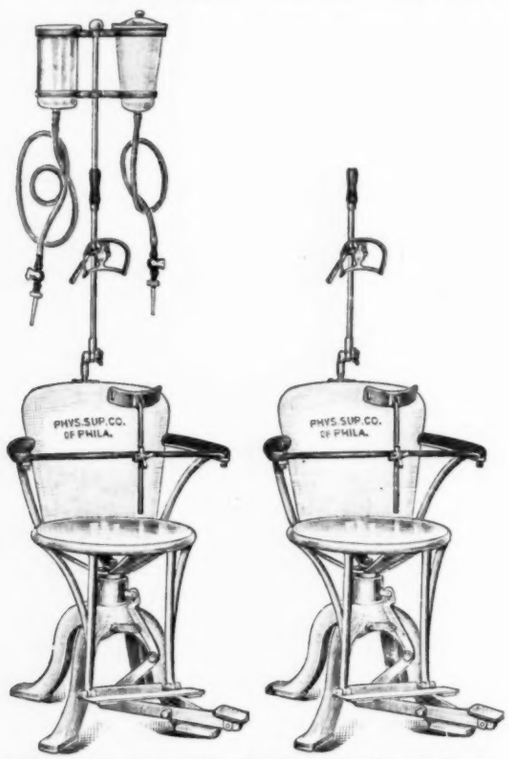
David Schwab, who was superintendent of the Hebrew Hospital and Asylum at Baltimore, Md., for six years, is now supervising the construction and equipment of the new Nathan and Miriam Barnert Memorial Hospital in Paterson, N. J.

American Model of the Barany Rotating Chair

During the last few years otologists have been paying much attention to the study of the semi-circular canal and the examination of the ear for intracranial localization. As a special chair for conducting turning tests is required in this work, a number of different models have been brought out abroad and in this country, but the chair devised by Dr. Barany, of Vienna, has always been pointed out as the only one fulfilling all the requirements.

The only reason why this chair has not become more popular in this country is the fact that its construction is rather complicated and consequently very expensive. Under the guidance of the staff members in the department of neuro-otology of the University of Pennsylvania a Philadelphia surgical instrument firm has developed a chair which has proven entirely satisfactory in the work carried on in that institution.

A cross-bar with adjustable head-rest for the front of the head can be inserted into the arm rests, while a head-rest, also adjustable, is attached to the upright bar at the back of the chair. To this upright bar a handle is attached for the purpose of rotating the chair, and for instantaneous stoppage a foot lever is provided.



Barany rotating chair, with and without douche attachment.

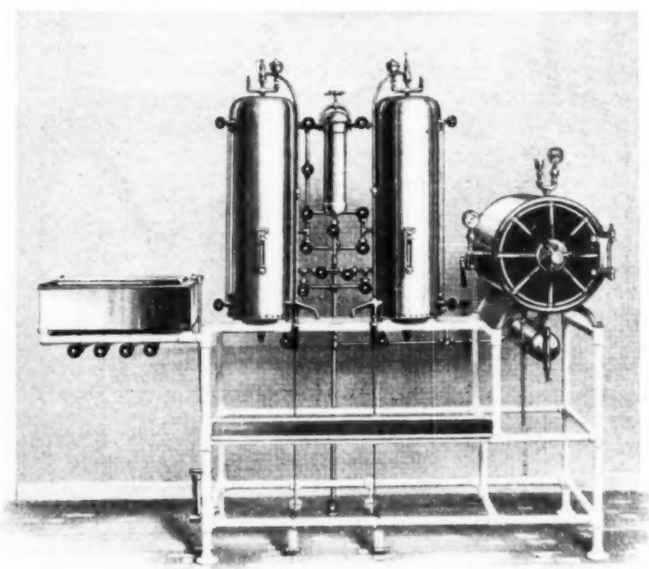
The remainder of the construction of the chair is such that it may be used as an examining chair for eye, ear, nose and throat work. In addition to the special purposes for which it was principally designed—such as the study of nystagmus, after stimulation of the ear; the differential diagnosis between the ear lesions and brain lesions; the intracranial localization according to Barany's pointing reaction; and the caloric test with hot and cold water —a complete douching outfit is provided.

A Simplified Combination High Pressure Sterilizing Plant

The accompanying illustration shows a high pressure sterilizing plant in the construction of which the manufacturers, instead of adding more and more complicated features to the equipment, as has been the tendency with some manufacturers in the past, seem to have given special attention to simplicity as well as efficiency.

The piping and the valves are all easily got at for cleaning as well as for operating. The combination stand has but four legs; the same sterilizers separately mounted would require sixteen legs. The cover of the instrument sterilizer is raised by a foot lever and is prevented from slamming by a pneumatic check. The sterilizer has a steam coil for heating, and valved waste and water connections. Apparently nothing is omitted that would save time or effort of the operator.

The water sterilizer contains the usual parts, the filter, safety valve, water gauges, etc., and it has the heating and cooling equipment for both reservoirs separately controlled. Formerly it was considered sufficient to provide a cooling coil for the "cold" reservoir only, but with this sterilizer it is possible to cool water in both reservoirs to a usable temperature immediately after sterilizing, thus saving considerable time.



Simplified high pressure sterilizing plant.

The ordinary water sterilizer draw-off valve is an unsightly, leaky contrivance, often difficult to operate and requiring the use of one or both hands. The foot-operated valves employed in this apparatus seem to be the nearest approach to perfection yet designed for this purpose. To draw water requires merely the pressure of one of the foot levers. Release of this lever permits the valve to close instantly by the action of a heavy spring. The levers are attached to the stand and do not touch the floor.

Each of these draw-off valve mouths is piped to the safety valve of the corresponding reservoir, so that during each sterilization, when the safety valve blows, the mouth of the draw-off is thoroughly steam-flushed (sterilized). Then, too, by this connection the exhaust from the safety valve is kept from spattering the walls and ceiling and is delivered instead where it is least objectionable.

The interiors of the water sterilizers can be cleaned thoroughly by any handy man without removing the reservoirs from their bases, and with no interference with the piping. A hand hole is provided for this purpose in the base, this feature of the plant being similar to modern practice in steam boiler construction.

The manufacturers are ready to guarantee that this dressing sterilizer produces dry, sterile dressings, in accordance with recognized standard methods under ideal conditions and in less time than required by other types of sterilizers. The main operating valve, as well as the others, are located up in front, perfectly accessible and close to the gauges, which tell the operator what is happening within the sterilizer. The door has a safety device which tends to prevent the operator from opening it while there is steam under pressure within the chamber, a feature well worth considering, as it will prevent accidents such as have occurred in the past from this source.

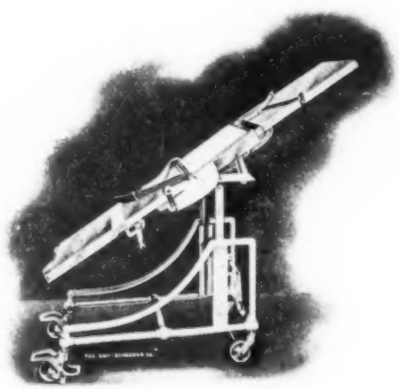
There is no space required at either end of the outfit for operating purposes, which means an occupation of minimum floor space. The sterilizers are manufactured by the Wilmot Castle Company, of Rochester, N. Y.

French Operating Chair-Table

Dr. T. R. French, of New York, has had designed a combination chair and table which has many advantages, especially for those operating about the head.

There has always been a need for a chair and table which would permit of the patient being quickly changed from one position to another, and few tables are suitable for mastoid, tonsil, goiter and other operations about the head or neck. Many hospitals use a regulation surgical table, often improvising some form of elevator, cushion or other device for placing the patient.

Dr. French calls attention to the marked decrease in the quantity of blood lost, the small amount of anesthetic required to produce narcosis, and the lessened strain on the operator; the latter due, in a large measure, to the patient being in the same topographical relation that is used in ordinary office examinations. He dismisses the subject of danger from blood flowing into the windpipe, as he is convinced "that the fear of blood flowing into the air passages is based upon theory and not upon fact."

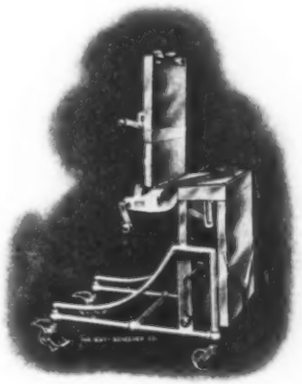


French chair-table in reverse Trendelenburg position.

Continued practice with the upright position, where the elevation is made without jarring, disproves the belief in danger to an anesthetized patient in this posture. The elevating racks on Dr. French's chair-table are milled and consequently work smoothly, so that the raising of the patient from the supine is free from vibration. The absence of any tremor in the crank-operated racks and gears adds to the value of the chair-table in preserving the blood balance.

The table is adjustable in height, permitting the surgeon to operate either standing or sitting; the raising and lowering being very easy. Furthermore, a simple device permits the tipping of the top into the Trendelenburg posture.

Those who have seen the ease with which operations are performed when the chair-table is used are convinced that it overcomes many difficulties and conserves the vitality of the patient. The top is in three sections, covered



French chair-table in chair position.

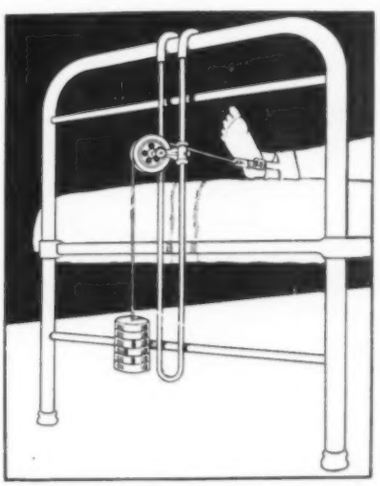
with nicalloy; the center having a corrugated rubber mat to restrain the tendency of the patient to slide forward when in the upright posture.

The head section is adjustable in length, and the seat can be raised; thus the chair-table fits all sizes of patients as if built especially for each case.

Straps, with universal buckles, hold the patient when in the sitting position. The aluminized, tubular steel frame is mounted on large rubber-tired wheels, those under the head end being fitted with floor brakes.

New Buck's Extension

An extension apparatus which is always ready for use and easily applied is one of the necessities for hospitals, large and small. The accompanying cut shows an apparatus which can be applied in a few minutes to any type of bed without injury to enamel or polish, as the fork-



New extension apparatus.

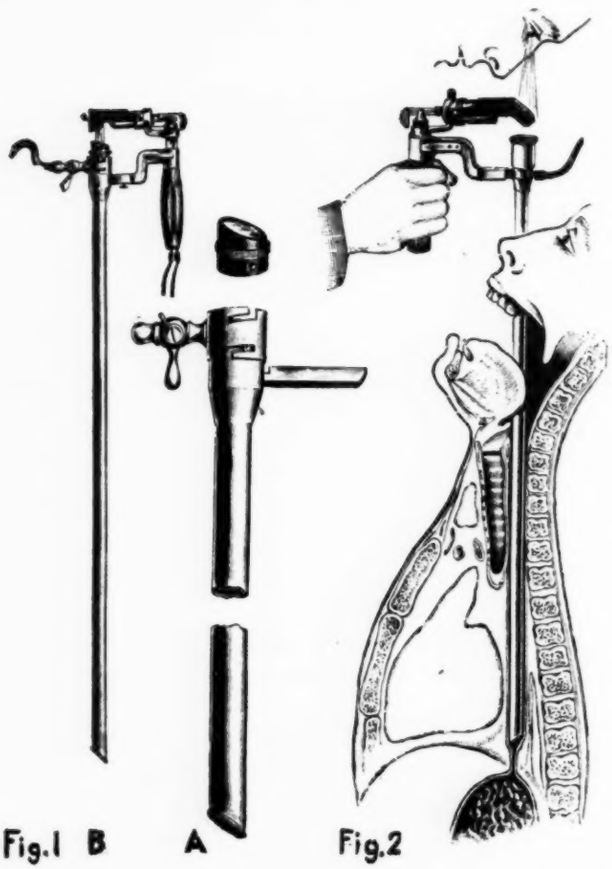
shaped part passing over the rail of the bed is rubber-covered.

The apparatus is constructed of steel and aluminum and weighs only three pounds, without the weights. A so-called automatic hitch is furnished with the outfit which holds the leg in the position required by the operator.

Combination of Instruments for Direct and Indirect Examination of the Stomach.

BY DRS. W. H. HILL AND G. HERSHEL, LONDON, ENGLAND.

The progress that has been made in the last few years in the methods of diagnosing diseases of the esophagus and stomach has led to the invention of various instruments for direct as well as indirect examination by means of electric illuminating apparatus. The instruments illustrated here are a combination of the well-known Bruening electroscope, a modification of the Killian esophagoscope, and the indirect vision Kausch gastroscope for the examination with the patient in a sitting position.

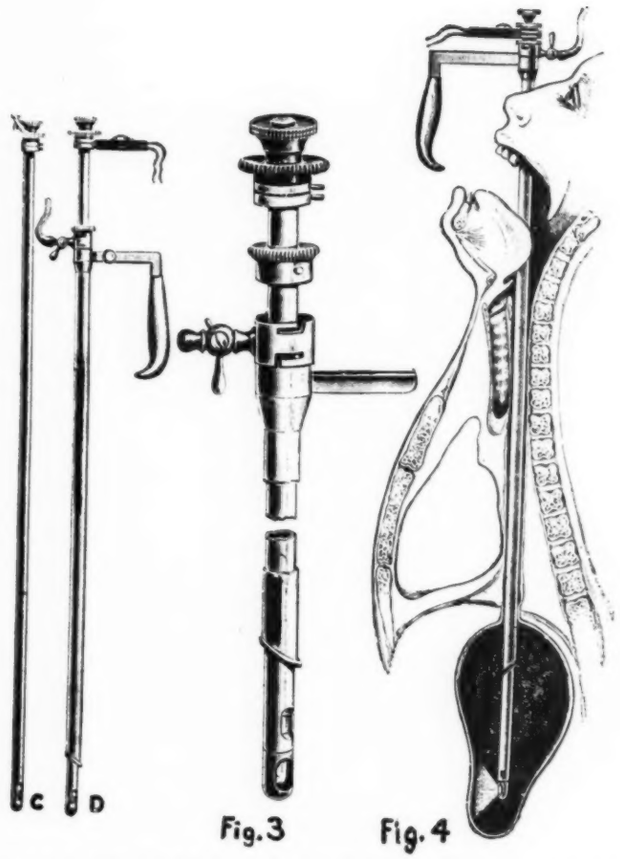


Figs. 1, 2. Bruening's electroscope and Killian-Hill esophago-gastroscope in process of introduction.

Fig. 1, A B, shows the direct vision elongated esophagoscope, to which has been added a nozzle with stop-cock for the purpose of attaching a double hand bellows for inflation, to facilitate introduction and a window to prevent the escape of air.

Fig. 2 shows the esophagoscope in process of introduction. In addition to making an examination of the lower part of the gastric cavity, specimens may be removed by means of the Jackson specimen cutting forceps for the purpose of microscopical examination, and provision is also made for attaching a small camera for taking photographs.

Fig. 3, C D, shows the indirect vision gastroscope (which is constructed on the same plane as a cystoscope) inserted through the esophagoscope. For this purpose the electroscope is removed, and the tube is attached to a handle which is formed at the same angle as the electroscope, which allows exerting considerable leverage on introduction of the tube.



Figs. 3, 4. Direct and indirect vision gastroscopes fully inserted into the stomach.

Fig. 4 shows both tubes fully introduced and the direct vision gastroscope in position to inspect the walls of the stomach as well as the pyloric antrum.

The Ellis Hospital, Schenectady, N. Y., opened on May 22 a fine new wing, erected at a cost of $100,000. The structure consists of three stories, basement and roof garden. It is fireproof and so far as possible soundproof. All of the doors in the building are of solid wood, with glass handles. The doors are made wide enough for beds to be rolled from one room to another. Floors are of Alaska tile. The new wing will be devoted largely to the care of private patients, children and maternity cases. Some of the rooms open directly on a veranda, and the beds may be rolled out through long windows. The children's rooms are very attractive. There is one large room for girls and one for boys, with a glass-enclosed compartment for the nurses between, the object of this arrangement being to make constant supervision possible. The serving kitchen is interesting. Food is brought from the main kitchen in a dumb waiter, and in the serving kitchen it is kept warm with an ingenious kind of stove which can be heated either by gas or electricity. A toasting grate and places to cook eggs and prepare special dishes are parts of this stove. There is also a tray cabinet, sink, ice box and other kitchen necessities.

According to a report recently issued by Miss Maude Van Syckle, executive secretary of the Detroit (Mich.) Society for the Study and Prevention of Tuberculosis, the sanatorium maintained by the society discharged as cured 187 out of 237 patients cared for during the last year. Only seventeen patients died. As a result of the work of two visiting nurses during the year it is asserted that patients are now more easily persuaded to enter the sanatorium and there is less resentment than formerly at what was regarded as interference.

THE HOSPITAL KITCHEN

Any questions regarding equipment or other matters connected with the kitchen and dependent departments of food storage and service will be answered in this department. Address communications to The Modern Hospital, Kitchen Department, Metropolitan Building, St. Louis.

China vs. Earthenware for Cooking Purposes

Previous to the last twelve or fifteen years all the earthenware used for cooking purposes was imported from Europe, principally from Luxemburg, Alsace-Lorraine and other districts of Germany and France.

The European chefs working in American kitchens, together with the foreign element constantly coming to this country, have created the demand for earthenware cooking utensils, such as casseroles, mustard cups, shirred egg dishes, etc., and this demand has gradually spread into the American household. Enterprising American manufacturers, recognizing the magnitude of the demand for this class of goods, discovered beds of clay as suitable for the manufacture of red-clay earthenware as are the European clays, and started the manufacture in this country; so that now the importation has practically ceased and the only cooking china imported is a negligible quality of white porcelain made from white china clays.

Red-clay earthenware is produced by first moulding the clay to the desired shape, next coating the inside surface with white slip, and then baking in a kiln at a temperature of from 2,000 to 2,200 degrees F. After being taken from the kiln the piece is dipped in liquid glaze, which is practically glass, and is again fired at a lower temperature than the first firing; this second firing melts the glaze and produces the thin skin of crystal glass which, after baking, forms the outside of all red earthenware.

As a result of this process of manufacture, we have, first, a white surface inside the vessel; next, the porous red clay body, which has been heated to the same temperature as the white surface; and outside of this a sheet of glass, which has been produced at a lower temperature than the two other strata to which it is attached.

Take a piece of broken red earthenware and apply a drop of ink to the red surface, then watch the ink rapidly disappear; its progress through the porous clay can be seen through the white lining as it travels by capillary attraction. This proves conclusively that when the clay body of the utensil is exposed to liquid—as it will be if a piece of the inside lining or the outside surface is chipped off—whether this liquid be the greasy water of the dishpan or the water or juices in the food, that liquid will be absorbed into the body of the utensil and will stay there. There it must undoubtedly cause deterioration of the utensil, besides being unsanitary.

Owing to the different densities of the body, the lining and the glaze, the expansion under heat and contraction when cooling is not the same, consequently the more rapid expansion of one or the other substance breaks the surrounding coating into hundreds of small cracks, which process is called crazing. If any colored liquid or grease is put in a crazed vessel it will be found that it settles in these cracks, and, being absorbed by the exposed porous clay beneath, the color cannot be washed out, no matter how much scrubbing is done.

These facts, which may be easily proven by a simple test with a piece of broken or crazed ware and a little ink or dirty water, show conclusively that a china which will not craze and which cannot absorb moisture even when chipped, must be more desirable for cooking purposes from a sanitary point of view. Consider also the standpoint of durability under the heat of the cooking oven: a vessel of uniform density of walls will be immune from breaking by heat, which cannot be the case to the same extent with a vessel like the red earthenware having walls of three different densities.

These considerations led Mr. R. T. Hall, of the Hall China Company, to set to work at East Liverpool, Ohio, several years ago, to see whether a purely vitreous china, having a glaze on the outside and inside, could not be produced from a mixture of white china clays, some imported from Europe and some found in this country, at one firing and at a temperature such as to preclude breakage inside any heat possible in cooking.

After several years' experimenting the new Hall vitreous chinaware was produced about two years ago, and today is the only chinaware with body and glaze produced at one firing. It is fired at a temperature of 2,400 degrees Fahrenheit, and the coating of leadless glaze is applied before the firing has taken place; therefore a homogeneous material, all of one density, is produced, which is absolutely impervious to moisture and susceptible of only one degree of contraction and expansion.

More costly materials make the cost of the new American product about 50 percent more than that of the red earthenware; however, it is a question whether the cost, spread over a year or two, is not really less than that of the older form of utensil, considering the factor of loss by breakage and crazing, in addition to the unsanitary conditions, which are bound to exist in any chipped or crazed utensils which have absorbed the moisture of the dishpan.

Hospital for Indians in Canada

The Canadian Department of Indian Affairs has recently built a hospital at a cost of $10,000 for the benefit of the school and of the Indians of the surrounding reserves. It is a substantial frame building, on a site within 300 feet from the school, and has accommodations for 25 patients. The basement and a veranda extend the width of the frontage. On the ground floor are the doctor's office, men's ward, women's ward, dispensary, operating room, dining room, kitchen and pantry; on the second floor are two semi-private wards, doctor's bedroom, nurses' bedroom and sitting room, housekeeper's room, bathroom, linen room and a bedroom for emergency help. A separate wing provides an isolation ward for infectious cases. Water and light are supplied from the school plants, and the hospital is heated by two hot-air furnaces in the basement. The nurse in charge, Miss Mabel Jenner, is reported to be fast winning her way to the hearts of the Indians and gradually breaking down their innate prejudice against hospitals.

North Carolina is the first state to combine county homes under a single roof. The Legislature, at the request of the three counties comprising the First Congressional District, has recently authorized the combining of the country homes of these counties, and the single institution will be called "Community House No. 1."

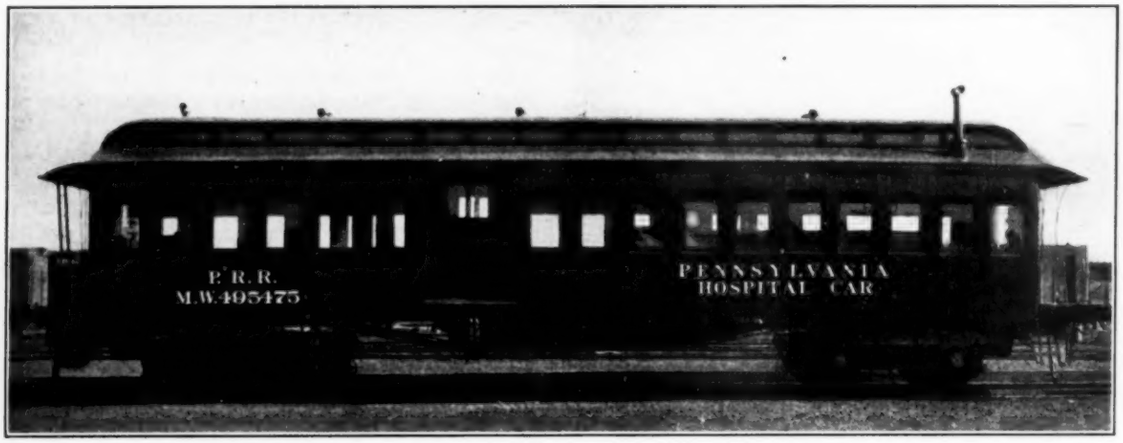


Fig. 1. The Hospital Car at the Enola shops, Pennsylvania Railroad.

FIRST AID IN INDUSTRIAL SURGERY

Speed Is not the First Consideration—Safety First—Railway Hospital Car Designed to Take Aid to the Injured Man, not Vice Versa—A Step Forward

[This is part of an address by Dr. Donald McCaskey, Witmer, Pa., before the Industrial Welfare and Efficiency Conference, Pennsylvania Department of Labor and Industry, at Harrisburg, Pa. We are indebted to the *Medical Record* for the illustrations and material.]

There is a fallacious notion that the moment a man is injured he must be rushed at break-neck speed to the nearest hospital. To get there quickly and at all costs is the idea. Everybody tries to help achieve this purpose. It does not matter much whether the injured one is suffering from a hemorrhage; whether he has been profoundly shocked; whether an agony of pain exists; haste is the dominant thought. Every process is speeded up to achieve this end. But this is wrong. It is an extravagant waste of the vitality of the injured patient to rush him under any conditions to the nearest hospital.

First aid does not mean that our machinery must be set in motion with the same dramatic fervor with which our city fire department responds to the alarm of fire. Neither does first aid mean the theatrical and skilled abil-

Fig. 3. Interior of car showing two cots ready for use. A number of stretchers are on hand. Boiling water is kept in a tank at end of car.

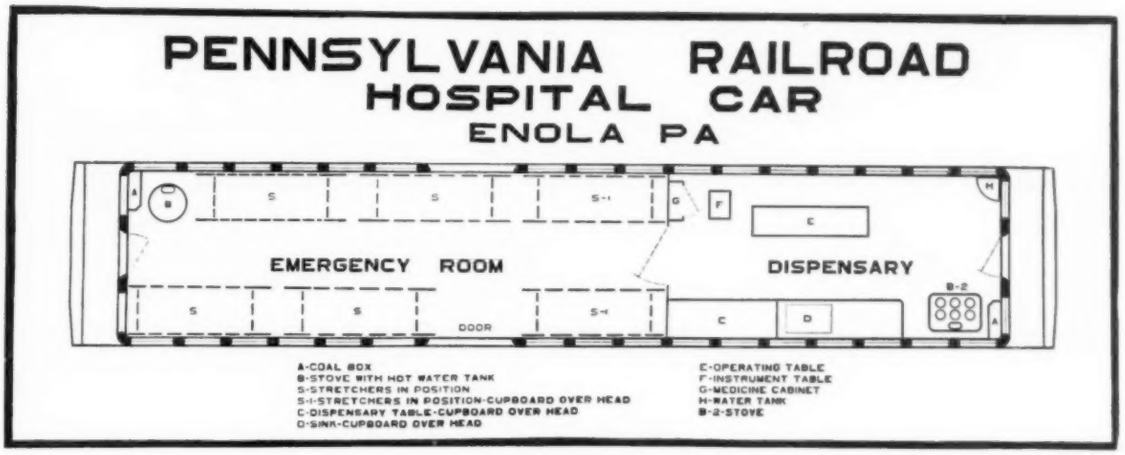


Fig. 2. Floor plan of the Hospital Car.

ity to put a bandage around a man's injured head or injured arm or leg in the seventeenth fraction of a second, as illustrated in motion pictures, particularly; all of which looks very wonderful to the spectator, who, when in the presence of an actual accident, usually stands around loudly critical as to what is done and very emphatic in declarations as to what you should not do.

The major thing to decide in all our first aid work is, "What is best for the injured man or woman?" Certainly haste is not the chief requisite.

Here is another point. Often when a person is injured it is absolutely wrong for that person to be lifted by unskilled hands. The tender sympathies of the surrounding bystanders may be strongly aroused, and every effort may be made by them to afford the injured one such degree of first aid care as they may be able to administer. However, first aid does not mean this type of help, for it is simply and solely because this kind of first aid is so unskilled, utterly incompetent, and usually untrained in the modern methods of first aid science, that bad results ensue.

In our first aid work we don't want to sacrifice everything to speed. Thorough training and first aid competency is the great essential. By having a thoroughly

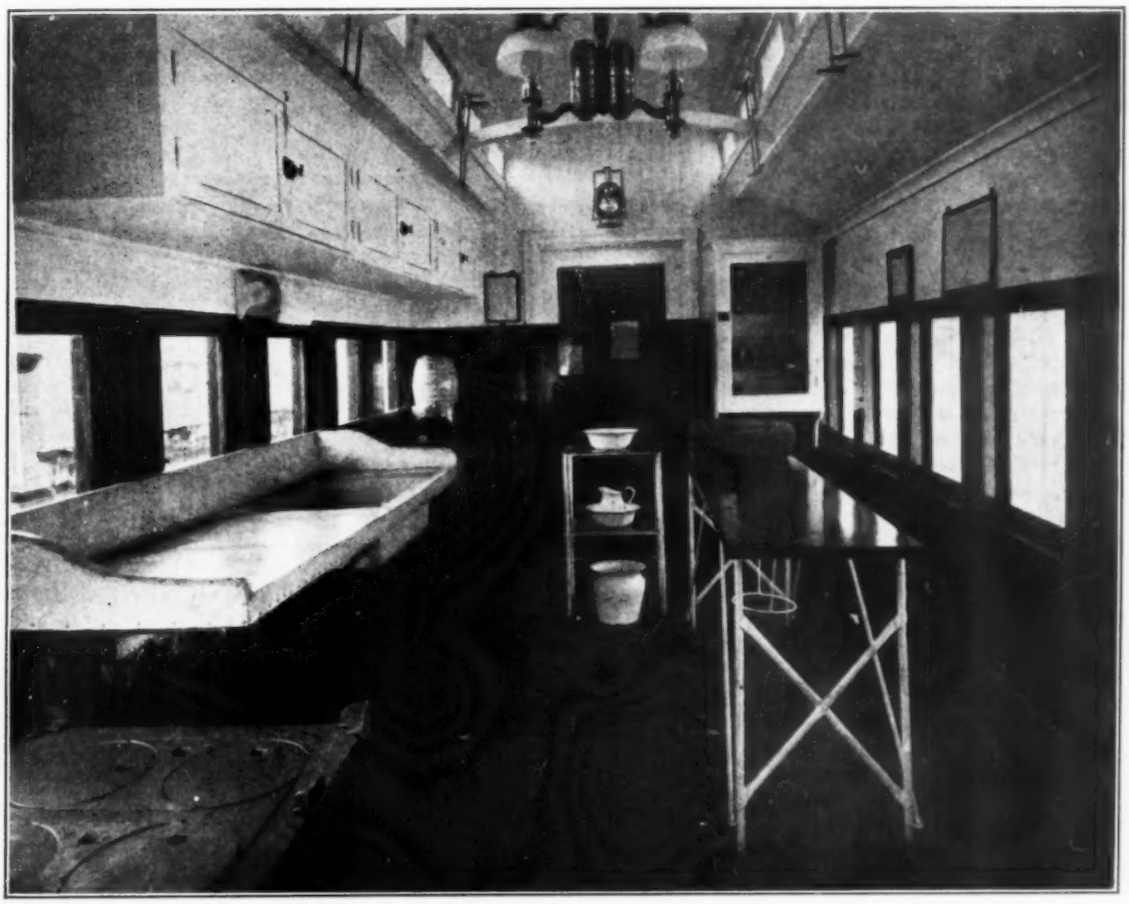


Fig. 4. Operating room in Hospital Car. Feet of table are set in sockets. Blankets, dressings, instruments and bandages are kept in lockers.

trained man on the spot to treat a superficial wound in a proper aseptic manner the injured man in a great many instances is able to continue with his work and have his wound redressed as the occasion requires.

New standards of efficiency have developed during the past decade not only in medicine and in surgery, but in first aid to the injured. In the Pennsylvania Railroad improvements in first aid method have kept step with improvements in the operating department. Instead of the old principle of speeding an injured man to the hospital irrespective of his physical condition, we find the newer principle, that of taking the hospital to the injured patient, employed on our Philadelphia Division, in the Enola shop and freight yards. At these yards, where over a thousand workmen are employed, General Foreman C. D. Gray has made over an old wrecking train car into a hospital car. He has placed one of his men in charge of this car, who keeps it thoroughly stocked with sterilizers, surgical solutions, bandages, dispensing tablets, stretchers, blankets, etc. The equipment is complete and everything is in readiness to take the hospital car to the injured man as soon as the engine can be coupled to it.

The following is a list of supplies on the hospital car:

Cupboard A. 6 wood blankets, 3 rubber blankets.

Cupboard B. 4 meat platters, 4 sugar bowls, 1 coffee pot, 1 frying pan.

Cupboard C. 6 wool blankets, 3 rubber blankets.

Cupboard D. 2 dippers, 3 meat forks, 3 large spoons, 26 knives, 31 forks, 23 table spoons, 34 tea spoons, 1 can opener, 1 steel, 1 butcher knife, 28 soup bowls, 1 4-qt. pitcher, 1 1-qt. pitcher, 1 2-qt. pitcher, 5 cups, 5 salt shakers, 4 pepper shakers, 6 tin cups, 1 frying pan, 1 roaster, 28 dinner plates, 1 stewing pan, 3 basins.

Cupboard E. 1 bottle iodine, 24 first aid boxes, 4 1-lb. boxes absorbent cotton, 6 5-yd. packages of Red Cross gauze, 1 pound bottle of antiseptic discs, 1 pint bottle of alcohol, 1 roll adhesive plaster 12 in. wide 5 yds. long, 12 rolls 3-in. Linton gauze bandage, 28 rolls 2-in. Linton gauze bandage, 40 rolls 1-in. Linton gauze bandage, 32 different sized splints.

Cupboard F. 1 5-gal. can, 1 coffee pot, 1 bag ground flaxseed, 1 can litholine, 2 Schapps tourniquets 36 in., 2 Esmarch tourniquets, 1 Fowler's infusion apparatus.

Cupboard G. 2 rolls antiseptic towels, 2 boxes individual drinking cups, 4 cotton blankets.

Cupboard H. 4 rolls 3-in. gauze bandage, 5 rolls 2-in. gauze bandage, 4 rolls 1-in. gauze bandage, 6 hot water bottles, 1 ½-lb. bottle chloroform, 100 tablets physiological salt solution, 1 drop bottle for chloroform, 1 Pilling folding Yankauer mask, 1 bottle Martin's toilet wash, 4 bottles Carron oil, 1 bottle antiseptic discs, 1 bottle compressed boric tablets, 1 bottle spirits of ammonia, 1 bottle cocaine, 1 jar moist gauze 5-yds., 3 medicine droppers, 1 eye cup, 5 1-yd. packages gauze, 10 1-oz. packages absorbent cotton, 1 box thymol iodide, 1 bottle chlorodyne, 1 aseptic hypo syringe, 25 hypo tablets atrophine sulphate 1-100 gr., 25 hypo tablets morphine sulphate 1-4 gr., 25 hypo tablets strychnine sulphate 1-30 gr., 25 hypo tablets digitalin pure (German) 1-50 gr., 1 1-lb. bottle of dioxygen.

Drawer J. 12 towels.

Drawer K. 5 pillows, 12 pillow cases, 11 sheets.

Miscellaneous. 8 stretchers, 1 operating table, 1 slop bucket, 4 cots and mattresses, 3 tables, 6 benches, 8 chairs, 6 camp stools, 1 instrument table.

When a workman is seriously injured, instead of lifting and bumping him and perhaps causing him to lose a quantity of blood and to suffer further shock, the hospital car is brought to him. Under the competent direction of the Red Cross attendant the injured man is promptly treated to first aid. His chances for prompt recovery and an early return to duty are immeasurably greater under these conditions than when he is handled by the untrained spectator or fellow-employee. Merely to apply mechanically a lot of bandages, no matter how cleverly the series of movements may be carried out, is not modern, efficient first aid.

Often a man who is slightly injured is induced to believe that he is seriously hurt, if sufficient dramatic interest is injected into his case by the first aid efforts of bystanders whose hearts are stirred. I have also a theory that many a man or woman slightly injured is started on the road to malingering, just because of incompetently applied first aid treatment.

First aid has certainly outgrown its swaddling clothes. A first aid package of gauze and iodine solution is not enough. There must be training behind the "man behind the gun," and not merely sympathy and a vague recollection of certain first aid principles once half-learned; there must be a thoroughness that goes with special first aid study and training.

NATIONAL CONFERENCE OF CHARITIES AT BALTIMORE

The Spirit of War and a Propaganda of Peace Among Social Workers, as Seen by T. J. Edmonds, a Member From Cincinnati

"The best Conference ever." So said the delegates to the forty-second National Conference of Charities and Corrections which closed at Baltimore May 19.

Best, not because the weather man shut off the steam, not because "Baltimore" and "beautiful" form an alliteration which is true as well as poetic, not because Baltimore is south of Mason and Dixon's line and is therefore pervaded with that famed spirit of Southern hospitality, although all these things are facts not unworthy of note; not even best because it reached the high water mark in attendance, registering 2,450 delegates as compared with 1,920 in the largest previous year.

Mrs. Glenn struck the key-note in the presidential address, "A Prelude to Peace." She did not talk war issues; she did not even try to foretell the war's time of closing or its after-effects. Her theme was this: that whatever the causes and whatever the obvious results, it is our business as social workers and as Americans to be ready to offer to Europe the real sources of strength for recuperation. These sources of strength lie in the restoration of normal family life, in the ability to return to the ordinary operations of daily business, in the education of the next generation for the big tasks before them, in the ability of the average man to stand up to the drudgery of the day's job and to retain his grip on the better things of life without the stimulus of brass bands and spectacular events, and in the readiness to sink differences and to forget them.

Neither did any other speaker in the entire Conference program indulge in war talk. The Conference was so neutral that President Wilson would have approved, so peaceful that Bryan would have applauded it, and withal so warlike that Roosevelt would have been delighted. Warlike, however, only in its marching spirit, its *esprit de corps*, and its faith, courage and inspiration. We have heard that war submerges party differences; so the Conference program sounded this note: that social workers are engaged in a war on destructive social conditions; that the general cause is bigger than the particular work

of any organization or individual; that we must look at the field as a whole and work for the entire social program rather than for the preeminence of our own little function. This was seen in the discussions on public and private outdoor relief.

War has its strategists and its tacticians; and the present war emphasizes the value of the former. Social workers have learned to become strategists and to plan broadly for the future. This was shown in the discussions of the unemployment situation. Out of the turmoil of last winter, the inevitable disruption of regularity, and perhaps of standards, has come a planning for the future in a bigger way than ever before. Remedies were suggested for the industrial displacements of the present period and even for the displacement which will probably follow the close of the war, in an ascending scale, namely, preparation for adequate relief; public "made work;" cooperating national, state and city labor exchanges; dovetailing of industries with alternating busy and dull seasons; regularization of industries within themselves; education of the market away from the vagaries of fashion and demand which make for rushes and lay-offs; illness insurance; unemployment insurance.

As at last year's meeting at Memphis, so again were the huge tolls levied by preventable disease, inebriety and feeble-mindedness strikingly emphasized by stories and figures. Here, too, was the war spirit shown; a conquest of the discouragement and disgust at the sight of wreckage, and a courage to fight our way inch by inch toward the elimination of causes.

The breadth of planning which characterized the Conference was well shown in the state-wide program submitted by the committee on children. This advocated a state board with adequate provision by means of institutions and "out-patient" work for all four groups of unfortunate children, namely, dependents, delinquents, defectives and neglected.

As a whole the Conference was fine, because of (1) the unity of its carefully planned program; (2) the emphasis on public responsibility; (3) the recognition on the part of the public group of the prime necessity of high standards of efficiency; (4) the attention given to broad community plans and preventive measures; (5) the sane conservatism of the remedies proposed; (6) the harmony of feeling among groups of workers; (7) and the indefinable inspirational quality of the whole thing, which cannot be spread on paper and which cannot be realized unless one were there to feel it.

The forty-third Conference will meet at Indianapolis next year. Its officers, as elected, are: President, Rev. Father Francis H. Gavisk, member of the Board of State Charities, Indianapolis; First Vice-President, James F. Jackson, Cleveland; Second Vice-President, Dr. James T. Gilmour, Toronto; Third Vice-President, Miss Minnie F. Low, Chicago; General Secretary and Treasurer, William T. Cross, Chicago.

CAMPAIGN FOR NEW SISTERS' HOSPITAL

West Philadelphia to Have $200,000 Group Under Auspices Sisters of Mercy

For the new Catholic Hospital to be erected in West Philadelphia, which has been mentioned in previous news items, a campaign has now been launched in the city of Philadelphia for the purpose of raising $200,000. The campaign is to be conducted under Catholic auspices and the hospital is to be managed by the Sisters of Mercy, although appeals are being made to the public at large. As planned, the hospital will be of the Italian Renaissance style of architecture and of fireproof construction. The main building will be in the center of a big lot recently purchased by the Sisters of Mercy, which is valued at about $150,000. The entrance will be on Cedar Avenue and will be 54 feet wide and 179 feet long, extending from east to west. From the ends of the main building will extend four wings, each 45 feet wide and 175 feet long. From the rear of the main building a fifth wing will extend north, 40 feet wide and 90 feet long. Thus every room in the house will have plenty of air and sunlight.

To the rear of the north wing will be a building to house the employees of the hospital and also those of the mechanical department. To the east will be the nurses' home, and to the west the convent for the Sisters. The first floor will have rooms for the administration department. The second and third floors will be occupied by rooms and suites for private patients. The maternity department will be on the fourth floor; special surgical cases will be treated on the fifth floor; kitchens, dining rooms for nurses, doctors, nuns and employees will be on the sixth floor, and operations will be performed on the seventh floor. This latter floor will be divided into four separate rooms, each with a separate sterilizing, etherizing and recovery room.

The northeast and northwest wings will be devoted entirely to wards. Each wing will be four stories high. Each will have a large ward and four smaller ones, with accommodations for two patients or more. The southeast and southwest wings adjoining the main building will have accommodations for private patients, twelve on each floor. These wings will also be four stories high. The north wing will have the resident physicians' dining room, bed rooms, billiard rooms, library and recreation rooms on the first floor and the chapel on the second floor. The dispensaries will be in the basements of the northeast and southeast wings and part of the basement of the main building. The receiving ward will be on the east side of the main building in the basement. The basement of the southwest wing will be devoted to a school for nurses.

Each wing, as well as the main building, will have separate diet kitchens on each floor. These kitchens will be connected by dumbwaiters directly from the main kitchen on the sixth floor. The alcoholic ward will be in the basement of the north wing. The fans for ventilating will be in the basement of each building, making each ventilating system a separate and distinct unit. There will be four electric elevators.

An automobile ambulance will be housed at the extreme east of the building, by which it will be possible to bring in patients from nearby points in Delaware county with the utmost speed.

NEW HOSPITAL FOR NEW YORK CITY'S FINANCIAL DISTRICT

Needed Institution to Be Opened Under Favorable Auspices

The projected Broad Street Hospital for the financial district of New York City promises soon to become a reality, according to Dr. A. J. B. Savage, one of the promoters. A movement toward the establishment of this hospital was started early in the year, with the indorsement of many prominent bankers, lawyers, business men and physicians of the city. Sufficient funds have now been raised to insure the success of the undertaking and temporary quarters for a thirty-bed hospital have been leased at 109-11 Broad Street.

It has also been decided to purchase a block of ground fronting on Broad Street and a half block fronting on Front and Pearl Streets as a site for a new building to accommodate probably 250 patients, and the promoters hope eventually to secure an endowment of a million dollars.

The Broad Street Hospital is to be a non-sectarian institution and will be devoted to emergency and general hospital purposes. A nominal charge will be made for ward beds and a moderate charge for private rooms. A dispensary will be operated in connection with the hospital.

The organization committee, which has charge of the raising of funds and the equipping of the hospital, is made up as follows: E. L. Wemple, Warner Sugar Refining Co., Chairman; A. J. B. Savage, M. D., Secretary; E. J. Dorgeloh, Assistant Cashier Coal & Iron National Bank, Treasurer; Harry S. Stewart, Counsel; George C. Luebbers, Treasurer Vacuna Co.; M. W. Dominick, Dominick & Dominick; John J. Connell, Chief of Staff, Public Administrator; Victor Ridder, Vice-President N. Y. Staats-Zeitung; William Tod Helmuth, M. D.; Hon. Maurice Featherson, Contractor; H. Ellsworth King; William H. Dieffenbach, M. D.; Hon. John J. Hopper, Register of Deeds, New York County; W. Channing Burbank, Clark, Childs & Co.; H. B. Van Note, Typewriter Supplies; Walter G. Crump, M. D.; Thomas J. McBride, Ticket Agent; James Rascovar, President New York News Lawyer; Robert H. Klitz, Jung & Klitz, Wholesale Jewelers; Charles Gennerich, M. D.; Walter L. McCorkle. Lawyer; Theodore L. Lutkins, Leather Importer; Ralph Bureau; Joseph H. Fobes, M. D.; Hon. Alton B. Parker, H. Stewart, M. D.; H. E. Smolen, Franklin-Mann Co., Sec. Life Saving Service, City of New York; John A. V. Sweeney, M. D. Dr. Savage is secretary of the committee and will be superintendent of the hospital.

The need for a general and emergency hospital in the southern part of Manhattan has long existed. The only hospital facilities available to more than a million people in that section are those of two small emergency hospitals, and it is certain that the Broad Street institution will find a large field of usefulness.

EMPHASIS ON OCCUPATIONAL DISEASES

New York Health Department Adopts New History Card to Help in Diagnosis

England, Germany and Italy have long recognized the importance of so-called "occupational diseases" and much valuable data has been compiled. Would it not be a significant advance toward better public health if our hospital clinicians laid a little more stress on the occupational history of their patients? The clinical history card below is being used in the new occupational clinic of the Department of Health of New York City:

Examined by..... (Date).....
Borough
Address

PHYSICAL EXAMINATION — DEFECTS

General Appearance:
Development: Good. Fair. Poor. — H't
Nourishment: — W't
Facies:
Mucous Membranes: Lips, Gums, Eyes
Fingers: Cyanosis, Clubbed, Deformed
Skin: Color, Eruption, Ulcers
Eyes: Pupils, Fundus — O. D., O. S.
Teeth, Tongue
Nose, Throat, Ears — A. D., A. S.
Lungs, Sputum — Expansion
Heart: Size, Murmurs, Blood Pressure
Pulse: Rate, Regularity, Artery Wall
Nerves: Reflexes, Twitching, Tremors
Muscular Strength: Rt. Lt.
Abdomen
Extremities, Varicose Veins, Flat-Foot
Glands, Orthopedic
Blood: Hgb., Diff. Red and White Cells, Wassermann
Urine, Albumin, Casts, Sugar, Lead, etc.
Remarks and Suggestions:

FIRM

DIAGNOSIS
INDUSTRY

OCCUPATIONAL HISTORY

Complaint *No.*
Name..... Age..... M. F. S.M.W.
Address..... *Fact No.*

	INDUSTRY	OCCUPATION	HOW LONG
1 Present			
Previous			

2 Description of Work — Hrs. of Work
Materials Handled

3 Exposed to:
a) Extreme Heat or Cold, Moisture, Chemicals, Irritating Fumes, Acids, Dust, Filings, Other Infectious Conditions
Portal of Entry
b) Strain: Muscular, Postural, Nervous, Eye, Ear, General Physical

4 Present History: Special or General Complaint
Alcohol, Syphilis, Chewing { Gum / Tobacco
Protective Agents: Milk, Masks, Respirators, Clothing or Gloves, Washing, Lunch Eaten Where, Washing, etc., Ventilation

5 Previous History: Cough, Expectoration (blood?), Night Sweats, Loss of Weight or Strength, Pains in Chest, Pneumonia?, Pleurisy?, Asthma, Bronchitis?, Family History of Tuberculosis, Backache, etc., Constipation

6 Previous Occupational Disease?
Fellow Workers Affected

7 Home Conditions: Character of Home
Work at Home, Causes for Worry, Distance from Factory, Transit Facilities, Bed Rooms, Windows, Hrs. in Bed, No. in Bed Room, Food: Kind, Amount, Alcohol, Disease in Family, Tea, Coffee, Recreation, Intelligence

Clinical history card used by the Department of Health, New York City.

Contracts have been awarded for the construction of the first three buildings of the new California State Hospital at Norwalk, near Los Angeles. The ultimate group is to consist of twenty-four main buildings, and in addition there will be farm buildings, residences, etc. The cost of the entire plant, including equipment, is estimated at $1,200,000. The plans are being drawn under the direction of state architect George B. McDougall.

The Charity Hospital at New Orleans is erecting a ward for tubercular patients.

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City..... State.....

NEWS OF THE HOSPITALS AND SANATORIUMS

The Mount Shasta Hospital, Yreka, Cal., has been closed.

A new county general hospital and almshouse is projected at Pasco, Wash.

More than $20,000 has recently been subscribed toward a new hospital in Kankakee, Ill.

Dr. W. H. Watson, Decatur, Ala., contemplates the erection of a two-story brick hospital.

The Huber Memorial Hospital, Pana, Ill., has recently added a $2,000 x-ray machine to its equipment.

Plans have been drawn for a three-story fireproof addition to the Toledo Sanitarium, Toledo, Ohio.

The erection at the Massillon (Ohio) State Hospital of a receiving building to cost $70,000 is contemplated.

A sanitarium at Manchester, Ga., conducted by Drs. Baker and McDonald, was recently destroyed by fire.

The construction work on a $50,000 nurses' home for St. John's Hospital, Fargo, N. D., will be started shortly.

Miss Jennie B. Sunderland has resigned the superintendency of the Shenandoah Hospital, Shenandoah, Iowa.

A movement for the erection of a municipal hospital for contagious diseases has been started at Pasadena, Cal.

A hospital for diphtheria patients exclusively is to be erected in Brooklyn for the New York City health department.

The Brokaw Hospital at Bloomington, Ill., is negotiating for a site for a children's ward to be erected at a cost of $40,000.

The Lehigh Portland Cement Co., Mason City, Iowa, is to have a hospital and bath house for the use of its employees.

The eleven hundred patients of Bellevue Hospital, New York City, recently enjoyed a circus performance on the hospital grounds.

Mrs. Emma A. Kempf, matron at the Newark (N. J.) Eye and Ear Infirmary for thirty-five years, has retired from active work.

Nearly eleven thousand surgical operations have been performed at St. Mary's Hospital, Rochester, Minn., within the last year.

A new, modern building for the Saginaw (Mich.) Tuberculosis Hospital was opened May 19. Thirty patients will be accommodated.

A movement has been started in Michigan toward the establishment of a hospital for members of the Degree of Honor in that state.

The Presbyterian Hospital, of Chicago, has received a donation of $110,000 to cover the indebtedness against the Sprague Home for Nurses.

Plans for a two-story addition to the Garfield Memorial Hospital, Washington, D. C., have been drawn by Architects Marsh & Peter, of that city.

A new hospital to be known as the John F. Eilbert Memorial was dedicated in Wyandotte, Mich., May 15. Miss Margaret Hickey is the superintendent.

Contracts have been awarded for a new diet kitchen, storehouse and new barracks at the Army and Navy General Hospital, Hot Springs, Ark., and further improve-

ments, including a new $10,000 operating room, are contemplated.

A movement has been started in Ohio toward the establishment of a state hospital for crippled and deformed children on the state grounds at Fort Ancient.

The Henderson (Ky.) city council has appropriated $25,000 for a new municipal hospital. The county is erecting a $10,000 tuberculosis hospital at Henderson.

A social service department operated in connection with the Babies' Hospital of Philadelphia follows up the work of the hospital until the children are six years old.

The erection of an addition and the remodeling of the building now in use are improvements to be made at the Deaconess Hospital, Wenachee, Wash., this summer.

Miss Anna E. Wray, formerly superintendent of the Altoona Hospital, Altoona, Pa., for several years, took charge of the Polyclinic Hospital, Philadelphia, May 1.

Efforts are being made in St. Louis to organize a stock company for the purpose of operating a health resort and sanitarium at the Montesano mineral springs, near that city.

The Cleveland Tuberculosis Sanatorium at Warrensville, Ohio, is developing a balsam forest surrounding the institution. Five thousand pine, fir and spruce trees have been planted.

Dr. William Mabon, superintendent of the Manhattan State Hospital, reports that 30 percent of overcrowding exists at the Manhattan, and that 22 percent is the average in state hospitals.

Miss Mabel G. Reed, of New City, was recently appointed housekeeper at the Cincinnati General Hospital following a civil service examination, in which she received the highest award.

Dr. J. W. Duke, State Superintendent of Health, Guthrie, Okla., is erecting an addition to his private sanitarium for nervous and mental diseases, which will double the capacity of the institution.

Plans for the proposed Unity Hospital at New York avenue and Union street, Brooklyn, call for a five-story building of brick and concrete fireproof construction. The cost is estimated at $40,000 to $50,000.

The Polyclinic Hospital, of Philadelphia, has recently appointed a woman intern, the first in twenty years. The successful applicant is Dr. Ricka S. Finkler, a graduate of the Woman's Medical College of Pennsylvania.

Ground was broken May 30 for the proposed East New York and Brownsville Hospital at East Ninety-eighth street and Rockaway Parkway, Brooklyn. The completed hospital is expected to cost, with its site, about $125,000.

A $20,000 hospital is being erected at Little River, Kan. The undertaking is financed by the business men of the town. Dr. J. H. Powers, of Winfield, Kan., will take charge of the hospital when it is ready for patients.

A $75,000 ward for tuberculous prisoners is to be erected at Clinton Prison, Dannemora, N. Y., the necessary funds having been appropriated by the last state legislature. Dr. Rogers of the prison recently stated that there were 407 cases of tuberculosis in the institution.

Architect Miller W. Scott, Waco, Tex., has drawn plans for improvements at the Methodist Orphanage of that city, which will almost double the capacity of the institution and will include hospital facilities. The orphanage now cares for about 200 children.

The death of Sister Mary Lorenzo, head nurse at the Seton Hospital, Cincinnati, occurred May 12. Sister Lorenzo had been connected with the Seton Hospital since its opening fourteen years ago. She was formerly located in a hospital at Mt. Clemens, Mich.

The John Arbuckle Memorial Building, a $235,000 addition to the Long Island College Hospital, Brooklyn, was opened May 26. Accommodations for 170 patients have been provided and the structure will house completely equipped x-ray and clinical laboratories.

Up to April 8 the American Red Cross has sent 63 surgeons and 217 nurses to the European war zone. Three more surgeons and eight nurses were sent May 1. The

total receipts of the society from August 1 to April 8 were $1,415,032; total expenditures, $1,243,189.

Miss Mary E. Heinrich, of Reading, Pa., has accepted the position of superintendent at the Toumey Hospital, Sumter, S. C. Miss Heinrich is a graduate of the Reading Surgical Hospital and has been night superintendent of the Jefferson Hospital, Roanoke, Va., for four years.

The Robert Packer Hospital, Sayre, Pa., is having plans drawn for an addition to accommodate twenty-five private patients. Plans for the building are being drawn by Architects Gibb & Waltz, of Ithaca, N. Y., in consultation with Dr. John A. Hornsby, of Chicago. The construction will be fireproof and the cost is estimated at $50,000.

A legislative appropriation recently signed by Governor Whitman permits the New York State Hospital Commission to enter into contracts for additional quarters for patients at the Long Island State Hospital for the Insane to the amount of $400,000, one-half of which is available at once.

Dr. Charles G. Wagner, superintendent of the Binghamton (N. Y.) State Hospital, was elected vice-president of the American Medico-Psychological Association at the annual convention of the association, held in Old Point Comfort, Va. The president of the organization is Dr. Edward N. Brush, of Towson, Md.

The donation of the residence of Robert Allerton, son of the late Samuel W. Allerton, 1918 Prairie avenue, Chicago, to be used as a unit in the erection of the proposed $1,500,000 plant for the Hahnemann Hospital of that city, has been announced. A gift of $100,000 for the surgery department has been made by William Wrigley, Jr.

John D. Rockefeller, Jr., has donated $16,500 to the Johns Hopkins Hospital for the treatment of blood diseases at a special dispensary to be established next September. The gift was made through the Rockefeller Bureau of Social Hygiene, and it is understood that additional funds will be provided by Mr. Rockefeller in the event that the undertaking proves successful.

The first annual meeting of the Vermont State Nurses' Association was held at the Rutland Hospital, Rutland, May 11. Officers for the ensuing year were elected as follows: President, Miss Mary E. Schumacher, of Brattleboro; first vice-president, Mrs. F. Patch, of Rutland; second vice-president, Miss Cora Curtis, of Burlington; secretary-treasurer, Miss Anna Aitken, of Rutland.

Miss Nellie R. Hamill, who has been in charge of the Williamsburgh (N. Y.) Hospital for the last three years, has resigned to accept the superintendency of the Hospital of the Good Shepherd at Syracuse, N. Y. Miss Hamill succeeds Dr. Mason R. Pratt, who recently left the Syracuse institution to become superintendent of the Hebrew Hospital and Asylum, Baltimore, Md.

The need of a new home for the Homeopathic Hospital, Providence, R. I., was discussed at a recent dinner given by the board of trustees to the ladies of the hospital aid association, and sentiment was expressed in favor of a campaign to be waged in the fall to secure the necessary funds. It was announced that $100,000 toward the required sum had already been raised and a site purchased.

Growing demands upon the Mercy Hospital, Hamilton, Ohio, have necessitated increasing the capacity of the institution, and a residence property adjoining the hospital has been purchased with the view of using it as a nurses' home, so that the space in the hospital building now devoted to nurses' quarters may be fitted up for the accommodation of patients. This hospital cared for 1,050 patients last year.

The nurses' home soon to be erected for the J. C. Blair Memorial Hospital, Huntington, Pa., at a cost of $30,000 is to be a two-story and basement structure of white Kittanning brick, with Indiana limestone trimmings and rock-faced mountain-stone foundations. The roof will be covered with red Spanish mission tiles to match the roof of the hospital. A large, imposing front porch will be of stone and roofed with tile. There will be an oriel balcony on the east end and small black iron balconies for window flower boxes at all the second and third story windows and a complete set of fire escapes.

AMERICAN DENTAL SURGEONS DOING GREAT WORK IN PARIS

Broken Jaws Are Mended and Torn Faces Made Over at American Hospital

One of the branches of work at the American Hospital in Paris most appreciated by the French people is that of dental surgery. This department was organized at the opening of the hospital last summer by Dr. George B. Hayes, a well-known American dentist of Paris. His purpose was to examine the mouths of all the patients coming to the hospital and to do such operations as would put each mouth in a healthful and comfortable condition; then to treat all cases of wounds involving the upper and lower jaws. The soldiers who arrived at the hospital were found to have large numbers of decayed teeth, which were painful and uncleanly. These teeth were either extracted or filled, as the circumstances called for, and the mouth made clean and comfortable. This treatment helped greatly in the recovery of severely wounded men, as it rendered possible the eating of food and prevented its defilement in an unclean mouth. Besides this kind of work there were serious operations necessitated by fractured jaws. According to Dr. William H. Potter, of the Harvard Dental School, who recently returned to this country after serving as a volunteer in the American Hospital, the prevalent methods of trench fighting have resulted in a large proportion of gunshot wounds being in the head and face, the latter being shot through from side to side, from above, from below, in reverse and all sorts of oblique directions. It naturally follows that the number of jaw fractures is great. Dr. Potter says that the teeth are often driven into the face, and there is usually a large loss of the bony substance of the jaws. Cases of this kind are treated at the American Hospital by the dental surgeon, although the general surgeon is consulted frequently and usually performs one or more plastic operations on each patient to close up the external wounds of the soft tissues of the face.

On May 5 there were 101 cases of fractured jaws under treatment at the hospital. The dental staff then numbered seven dentists, four nurses, four laboratory men and one secretary, a total of 16. A call was issued later in the month for five more volunteer dentists and five dental mechanics.

An idea of the importance of this head and jaw surgery and the results it is accomplishing is expressed in a letter from Mrs. Lawrence Benet, wife of one of the managers of the American Hospital, recently printed in the Philadelphia *Telegraph*. Mrs. Benet had just returned from a visit to the United States. The letter reads, in part, as follows:

"We both went back to work April 2, the day after our return, and truly it hardly seems as if our visit to America had been more than a pleasant dream—it all went so quickly—but I feel the change and rest were good for us both and we are better able now to go on with our duties, as we were more tired and worn out than we realized. Everything is going so well at the Ambulance, and at present we have, from yesterday morning's account, 479 wounded, with beds for 501. The last cases arriving since forty-eight hours are principally bad head and jaw cases, and I feel so content for the poor fellows to think they have a chance to go out again in the world without being repulsive to their fellowmen—as we saw a poor young fellow on the Boulevard recently, his face so terribly deformed and contorted that you knew he had not been where he could have the proper care to avoid such a sad result."

TO AID THE WOUNDED IN WAR

Twelve Commandments to Avoid Crippling of Wounded Soldiers

Professor Ritsch, of Freiburg, has recently issued a set of rules for guidance of German surgeons in attendance on the wounded at the front. These rules, posted in all hospitals in Germany, follow:

1. Remember that rest of joints (stiffness) and muscles (atrophy and weakness) is harmful.
2. Do not depend on orthopedic mechanical after-treatment, but attempt to avoid it by your results. In severe cases, however, refer your patient to mechano-therapy as early as possible in order to save time, trouble and money.
3. Avoid keeping joints in one position; move them as soon as the fracture is healed (change angle of joints; use passive motion).
4. Attempt to retain the valued power of the muscles by the very early use of massage, electricity and active movements, both with and without resistance, performed under your supervision.
5. Remember that extensors atrophy much more rapidly than flexors. Above all, try to keep the deltoid and the quadriceps femoris intact, as the arm and leg without them are of little use.
6. If on account of severe injury to soft parts prolonged immobilization becomes necessary, place the joints in a position in which, if ankylosed, they will be most useful;
   Shoulder: In the position afforded by an ordinary sling.
   Elbow: At a right angle.
   Forearm: In pronation.
   Wrist: Over-extended as in writing, or as in clinching the fist.
   Fingers: Slightly flexed.
   Hip: Slightly flexed and abducted.
   Knee: Slightly flexed.
   Ankle: About at right angle and slightly rotated inward.
7. Avoid allowing the wrist to fall into continued flexion when the arm is carried in a sling, since if permanent, tight closure of the fingers is prevented.
8. Keep fingers limber. Don't overbandage them and don't forget to tell the patient to keep them in motion. If possible, retain some sort of grasping organ (Greifzange), for an artificial hand is insensible.
9. Stimulate circulation, especially in individuals confined to bed, by means of movement of the limbs and by deep breathing; for increased blood supply stimulates internal organs and increases their regenerative capacity.
10. Remove extravasated blood as soon as possible (elevation, massage, heat, hydrotherapy), for coagulated blood causes irritation, leading to adhesions, and when present in large amount to fibrous bands. The latter, however, cannot, as a rule, be entirely removed. Remember that the absorption of blood and lymph is most impeded in the distal parts of the limbs, and that the spontaneous absorption in this location must always be supplemented by artificial means.
11. Do not consider it below your dignity, in doubtful cases and in cases where your own technical ability is insufficient, to call in a more experienced practitioner, for by this means not only do you increase your knowledge, but the patient is benefited.
12. Don't neglect mechanics, for our body is a mechanical marvel. Only that person is fitted to repair a complicated machine who understands its mechanism and who is himself a good mechanic.—*Journal of Surgery*, 1915, Vol. XXIX, No. 5.

Solid Food

The doctor asked the old darkey in the ward:
"Well, George, how do you feel?"
"I feel right tolable, boss."
"Have you had any nourishment?"
"Yassah."
"What did you have?"
"A lady done gimme a piece of glass to suck, boss."
—*Medical Pickwick.*

MARYLAND WOULD ABOLISH STATE AID

State Charity Board Recommends Contracts With Hospitals Caring for Public Charges

The Maryland Board of State Aid and Charities is advocating the abandonment in Maryland of continuing appropriations to private charitable institutions by the state legislature and the substitution therefor of the contract system. The board recommends that the change be accomplished by the adoption of an amendment to the state constitution and suggests as such an amendment the following:

"No money shall be drawn from the treasury of the state by any order or resolution nor except in accordance with an appropriation by law, and no appropriation shall be made for a longer period than two years; and every such law shall distinctly specify the sum appropriated and the object to which it shall be applied, and it shall not be sufficient for such law to refer to any other law to fix such sum or object; provided, that nothing herein contained shall prevent the General Assembly from placing a contingent fund at the disposal of the governor, who shall report to the General Assembly at each session the amount expended and the purpose to which it was applied. All appropriations for the treatment, care or support of the indigent poor in institutions not owned and controlled entirely by the state, or for dispensary treatment, shall be by contract, in which the state shall agree to pay so much per capita for persons placed, treated or prescribed for in such institutions or dispensaries so contracting with the state, and in no case shall a gross sum be paid to any such institution or dispensary. And the legislature may pass from time to time laws to carry into effect this provision. An accurate statement of the receipts and expenditures of the public money shall be attached to and published with the laws after each regular session of the General Assembly."

"Wounded: London Hospital, 1915," is said to be one of the most striking pictures exhibited this year at the London Academy. Mr. Lavery has presented the copyright of this picture, acknowledged to be one of the best he has ever painted, to the London Hospital. Photogravures will be sold for the benefit of this institution.

A post-graduate course in tubercular diseases was conducted at the Philadelphia General Hospital during April and May, for the benefit of physicians. It is understood that this course was the initial move in an extensive campaign for furthering medical study, which will include practically every form of disease. Instruction and demonstration charges to cover the actual expenses of the various courses will be made.

An organization to be known as the Louisiana Society for Mental Hygiene has recently been formed at New Orleans. In addition to making scientific studies of psychic disorders the society will conduct a state-wide campaign of education looking toward the improvement of the state's facilities for the proper care and treatment of the insane, and with a view to safeguarding the race against increase of feeble-mindedness.

Petitions for a $100,000 bond issue to provide funds for the erection of a county tuberculosis hospital are being circulated by the Jasper County (Mo.) Anti-Tuberculosis Society. Jasper County includes the towns of Joplin, Carterville, Webb City and Carthage and is a center of extensive mining industries. The Jasper County Anti-Tuberculosis Society was instrumental in securing the passage at the last Missouri legislature of the law granting state aid in the maintenance of county tuberculosis hospitals, having in view at the time the campaign that is now being conducted.